

AMERICAN

ARTISAN

RESIDENTIAL AIR CONDITIONING

WARM AIR HEATING

SHEET METAL CONTRACTING

January

1956

DIRECTORY

NUMBER

See the yellow pages for

Directory Section . . .

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Sure to Appeal

the

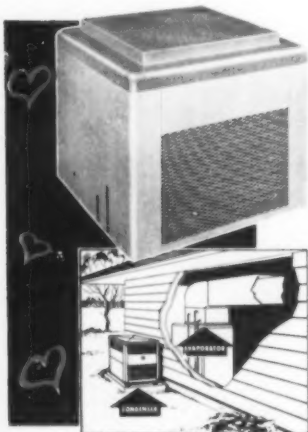
ROUND OAK

COMPLETE YEAR 'ROUND AIR CONDITIONING LINE!

TO MEET the demands of the public you serve . . . to sell and profit 365 days a year . . . you need the complete heating and cooling line, with the latest in engineering advances and modern design . . . *the ROUND OAK line!*

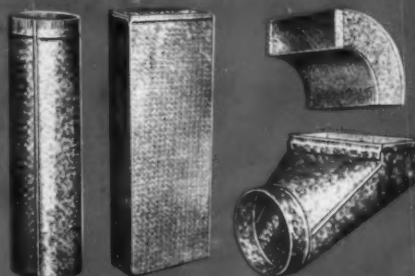
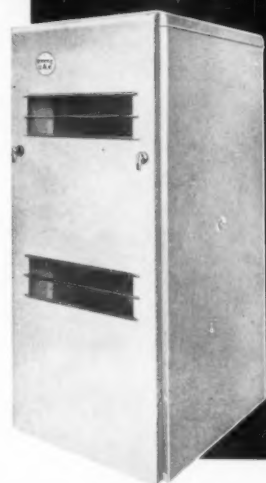
HEATING

. . . whether for basement or utility room installation—gas-or-oil-firing—there's a ROUND OAK winter conditioner designed specifically for the location. Newly designed "gravity" and "horizontal" units round out the line.



COOLING

. . . the perfect combination "Clima-Twins" matching heating and cooling units . . . the more compact "Clima-Twin-Aire" remote evaporator . . . the economy-minded "Clima-Twin-Zone" . . . air-cooled and water-cooled models for all types of installations and every budget requirement.



"MASTER-FIT"

. . . save time, material and labor with cartoned ROUND OAK "Master-Fit" die-cut, prefabricated galvanized pipe, duct and fittings.

ROUND OAK CO., INC.
DOWAGIAC, MICHIGAN

*A Symbol of Comfort
... for 85 years!*



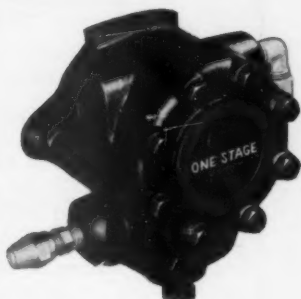
... sales aids designed for selling like this 58-page self-seller

... make anyone a salesman, any salesman a star!



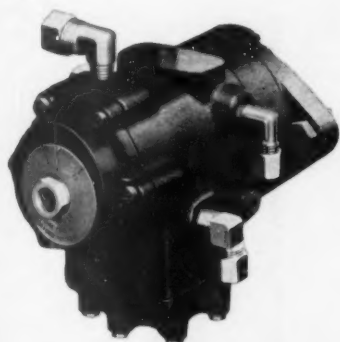
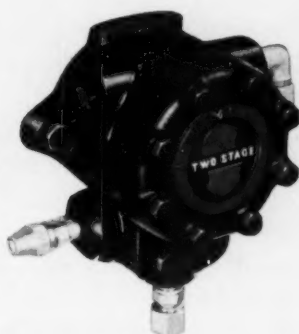
First in fuel units . . .

SUNDSTRAND



MODEL J (left)—high-pressure, single-stage for single-pipe or two-pipe installations. 3, 6, 10, 14, and 20 gph.

MODEL H (right)—high-pressure, two-stage, for long line, high lift. 3, 6, 10, 14, and 20 gph.



MODEL AT (left)—low-pressure, two-stage, extremely compact unit. Handles entire firing range (.4 to 1.5 gph) with one large orifice nozzle. Measures 7" x 4½". Weighs 9 lb. High lift, with vacuum up to 20".

**Just three models handle all
your fuel unit requirements**

Here's simplicity for you . . . you can handle *any* fuel unit application with a Sundstrand Model "H," "J," or "AT"! Members of this fine family have Sundstrand famous "firsts"—compact, modern styling . . . improved porting . . . constant, even oil flow, free from turbulence . . . one-piece, easily cleaned, positive-seating strainer . . . nylon pillow to cushion tank hum . . . hydraulically equalized Rota-Roll action. From this simplified Sundstrand line you can select the right pump for any job, and be sure of getting longer life, better, quieter performance, and simplified field service. That's why "specify Sundstrand" is a sound business slogan!

**SUNDSTRAND
HYDRAULIC
DIVISION**

of Sundstrand Machine Tool Co.
2210 Harrison Ave., Rockford, Illinois
Made in Canada by John Inglis, Ltd.,
14 Strachan Ave., Toronto

Made in Sweden by Sundstrand Hydraulic,
AB Stockholm.

AMERICAN ARTISAN

JANUARY 1956

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Founded 1864; Vol. 93 No. 1

RESIDENTIAL AIR CONDITIONING

WARM AIR HEATING

SHEET METAL CONTRACTING

Merged with American Artisan are "Warm Air Heating" and "Furnaces and Sheet Metals"

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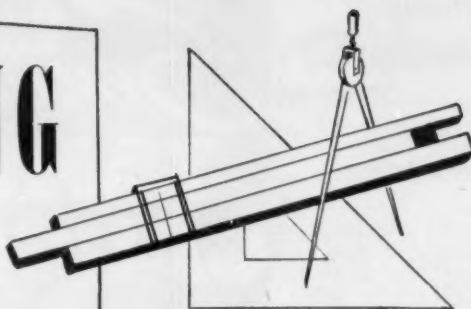
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year aiding business progress

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ENGINEERING

makes the
Difference!

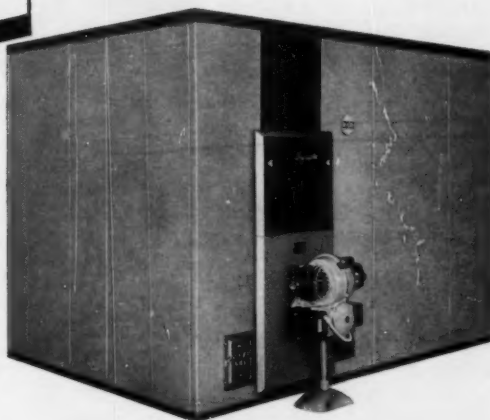


When prices are closely competitive, the difference between getting a contract and *almost* getting it is a matter of comparative quality. In Syncromatic, you get a complete line designed and built to traditionally high standards of *quality*. So whether it's

HI-CAP (High Capacity) furnaces

for commercial heating or—

the superbly engineered *Syncromatic* line of home heating units—



O.F.B. 100 OIL FIRED
1,000,000 OUTPUT



GF Gas Lo-Boy
75 — 145,000 B.T.U.
Input



"500" Series
Gas or Oil
Counterflow



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75 — 95,000 B.T.U.
Input



"500" Series
Gas or Oil
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Oil fired
90 — 146,000 B.T.U.

You've got the jump on competition with Syncromatic. Here are Hi-Boys, Lo-Boys, and Counterflows for Gas or Oil — capable of meeting the precise requirements for every type of home or industrial installation. Available for burning oil, gas, coal — easily converted. Gas models AGA approved. Nationally advertised. Get the facts and you'll go Syncromatic!

Typical industrial furnace for schools, churches, public and commercial buildings. Oil, gas, stoker or hand-

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Write Now for the big story on home and commercial heating with Syncromatic top-flight quality.

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on the Syncromatic Line of Furnaces for
Industrial and Home Heating

Name

Company

Address

City Zone State

Syncromatic Corporation

WATERTOWN, WISCONSIN

the editor's notebook

Thumbing Through This Month's Artisan

... we find over 1600 new products listed in the completely revised annual *Directory of Residential Air Conditioning, Warm Air Heating and Sheet Metal Products* published in the yellow pages at the back of this issue. There are over 200 new manufacturers of components who entered this field during the past 12 months. You will find them listed in Part IV. Advertisers in this issue are listed in Part I under the headings for the products advertised. The best way to use the directory is to look in Part I for the heading for the product in which you are interested. When you find it turn to page 132 d and under the manufacturer's name you will find the page number for his advertisement. Turn to the ad and if the product meets your need, write the manufacturer for additional information and prices.

Part II of the directory contains the names of all manufacturers of equipment who are classified under headings describing the product. Part III identifies the name of a manufacturer with a trade name of a product. Part IV contains the complete address of all nationally known manufacturers of products used in this industry.

Planning

... and we see how a dealer-contractor has built an expanding business on the theory, *Look Ahead ... and Plan for Profit*. With an eye to future growth, this dealer has set about streamlining shop and managerial facilities

Sentry

TANK GAUGES

REMOTE READING
INDOORS • OUTSIDE
UNDERGROUND



**ACCURATE, DEPENDABLE,
WEATHERPROOF GAUGES**
Easy to install... Easy to read!

Unaffected by specific gravity changes or variations, Sentry Remote Gauges accurately indicate liquid level at all times. Simplified mechanical operation eliminates unnecessary fittings, bulbs or levers for serviceman to tamper with as well as his need for access to building. Remote Gauge may also be combined with At-A-Glance Direct Gauge, shown below, for readings at both tank and remote location if desired. Non-corrosive, stainless steel and brass extension lines connect tank float with heavy-duty cast aluminum, weatherproof, thermometer type indicator — calibrated in fractions. Unconditionally guaranteed. Write for descriptive literature.

Type D-O and D-10 Gauge for basement tank installations with 2" and 1 1/2" openings respectively.

Type D-U Gauge for underground tank installations. Fits 2" openings only.



Sentry AT-A-GLANCE GAUGES

For accurate DIRECT tank readings

Fastest selling, most popular gauge in the industry. Simplified mechanism eliminates gears, cams, springs and magnets that wear out and cause trouble. Durably constructed with patented assembly featuring unbreakable, fog-proof, heavy-duty double plastic domes with printed calibration scale between for clear, easy-to-see readability from any direction. Gauge is Underwriters' Listed and will withstand in excess of 70 lbs. air pressure per sq. inch. Entire unit is non-corrosive and guaranteed leakproof under pressure filling and against defective operation, workmanship and materials. Quick, simple to install even on partially filled tanks. Write for complete descriptive literature.

KRUEGER Sentry GAUGES

GREEN BAY • WISCONSIN

the editor's notebook

(continued)

to handle more work with less time, effort and cost. Another presentation in Artisan's "TRAINING PROGRAM" ... IN PRINT" series designed to advise the dealer-contractor and his employees in all phases of his business, the article points out how ample working space, organized storage and handling procedures and delegation of authority can open the door to more and more business.

Bypass

... We learn how to *Bypass Cooling Coil to Eliminate 'Humidity Bump'* which often accompanies continuous blower operation in residential air conditioning systems during the cooling season. Author S. W. Reid outlines alternative bypass arrangements and defines their applications. Advantages of using a humidistat in controlling damper and compressor operation are discussed by the author in another contribution in the continuing series of articles on fundamentals of residential air conditioning.

Fabrication

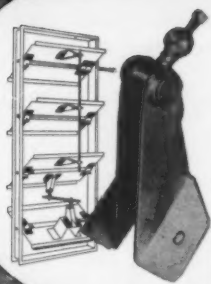
... and we are shown *How to Fabricate the New Paintable Galvanized Sheets* by author W. E. McFee, who gives us a rundown on the development of a coating which takes paint without the necessity of pre-treating the sheets and does not chip or crack under normal forming conditions. The few precautions which should be taken in forming and welding are described and illustrated in the timely ar-

DURO-DYNE

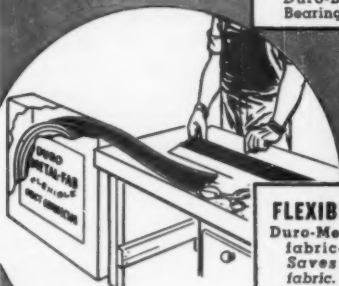
makes you the lowest bidder

When you've got to figure tight—when a "pennies per unit" lower bid on a ductwork section, damper or control will clinch the contract...but where quality cannot be sacrificed, investigate Duro-Dyne.

More than 150 Duro-Dyne products for the warm air and ventilating fields save you time and labor, keep your fabrication, assembly and installation costs way down, help you figure lower on jobs. Quality is maintained or, in many cases, improved.



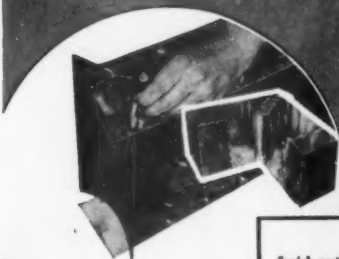
NEVA BIND DURO-BLADE KIT
Precision Engineered Damper Hardware
Unique 4-way adjustability permits smoothly operating, absolutely non-binding louver dampers to be made quickly with little care and no alignment afterward. Kit consists of 1 Neva Bind Duro-Bracket, 1 pair self oiling Duro-Bushings and 1 pair Duro Bearings.



FLEXIBLE CONNECTOR PRODUCTS
Duro-Metal-Fab—Preassembled metal-to-metal—Double-Loc Seamed. Saves expense of attaching metal to fabric. Available in 100 ft. and 50 ft. rolls.
Econ-O-Fab—Lower price, same construction and quality as Duro-Metal-Fab, for residential and lighter gauge ductwork.
Duct Fabric—Quality fabrics without metal. 100 ft. rolls of 6" or 10" wide canvas, 6" wide asbestos and 6" wide neoprene.

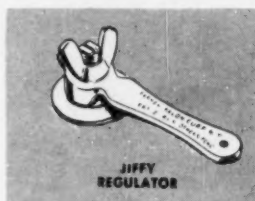


JIFFY DAMPER
Complete, prefabricated, inexpensive dampers ready for immediate installation in ductwork. Consists of famous Jiffy Regulator preattached to galvanized iron blade. Two styles available: JDS Series with patented Spring-Loc. JD Series — without Spring-Loc.



DURO-VANE-RAIL
Laid out and punched side rails for making high quality air turning vanes. Saves 50% in installed costs. Insert vanes in notches provided in Duro-Vane-Rail. Place chisel (supplied free with DVR) on protruding portion of vane in slot. One blow securely locks vane to rail.

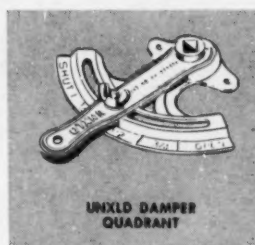
Here is a partial list of Duro-Dyne's large, varied line:



JIFFY REGULATOR



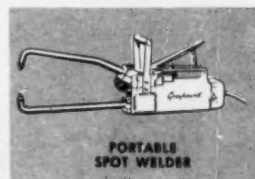
DIAL DAMPER REGULATOR



UNXLD DAMPER QUADRANT



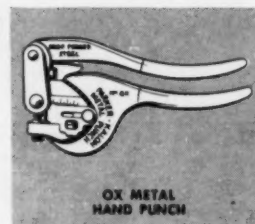
HEAVY DUTY and BALL BEARING DAMPER QUADRANTS



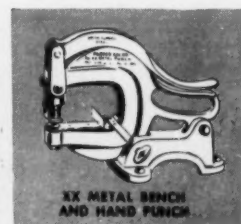
PORTABLE SPOT WELDER



DAMPER ROD CLIP



OX METAL HAND PUNCH



XX METAL BENCH AND HAND PUNCH

Write us for literature or see your distributor.

DURO-DYNE CORPORATION

800-B Third Ave., New Hyde Park, New York

the editor's notebook

(continued)

ticle on a development which has long been needed in the sheet metal industry.

We Like Them 'Short and Sweet'

THIS BRIEF note came in the mail from W. G. Arnold, London, Ont., along with his check for continuing his subscription: "OK to continue for another year. Best heating magazine in my 45 years of business."

That's our aim, Mr. Arnold. Our motto is to make each issue better than the preceding one.

Statistics Show Heating, Cooling Markets

THE U. S. Department of Labor, in its report "Characteristics of New Housing," has broken down the various sizes of houses into four different categories — 1) those under 800 sq ft; 2) those between 800 and 1300 sq ft; 3) those with 1300 to 1800 sq ft; and 4) those with over 1800 sq ft. It is interesting to note that 7 percent are in category 4 (over 1800 sq ft). This is a ripe market for multiple warm air heating and summer cooling systems. Category 3, 19 percent, (1300 to 1800 sq ft) certainly lends itself to zone type heating. Category 2, the largest group of houses (55 percent) provides an excellent market for all types of air distribution systems because of the many varied floor plans which may be offered the purchaser. The homes in category 1, 19 percent, (under 800 sq ft) will require smaller equipment, but care in air distribution systems must be exercised to eliminate drafts.

The FACTS, Sir...

**A GOOD
DISTRIBUTION
SYSTEM IS THE
ONLY WAY A UNIT
CAN DELIVER ITS
RATED OUTPUT!**

GOOD installations result in a minimum of trouble-calls; a maximum of customer satisfaction. A GOOD installation is, therefore, **LOWEST IN COST** and **HIGHEST IN PROFIT.**

IT'S A FACT that better installations result from use of better materials. IT'S ALSO A FACT that to be sure of better materials, you should always

"Standardize with STANDARD"
PIPE, ELBOWS, DUCT & FITTINGS.

Contact your STANDARD jobber today!

STANDARD
FURNACE SUPPLY CO., LTD.
714 South 72nd St. P. O. Box 1312 Phone REgent 1744
OMAHA, NEBRASKA



the editor's notebook

(continued)

No Bets Overlooked By Cooling Salesman

ONE EVENING just before Christmas I was listening to a favorite disk jockey who periodically interviews visitors to the fair city of Chicago. My interest was intensified when I heard the name Allen Creekbaum of Decatur mentioned, and I really sat up and paid attention when the interviewer said "Allen Georgenson of Columbus, O." Both of the names are well known to American Artisan. Besides being subscribers, these men are known by reputation as a leading warm air heating dealer and manufacturer's representative respectively. It was very pleasant to hear comfortable living discussed unrehearsed on the radio, but the part we liked best was Allen Georgenson trying to sell the disk jockey a cooling system for his home. I agree with Mr. Georgenson's philosophy, "Never pass up a prospect."

Forecasts Rapid Rise in Central Cooling Sales

CLOUD WAMPLER, Carrier Corp.'s president, has recently announced the findings of his company's market research department in future prospects for the residential cooling industry. Mr. Wampler writes me that in 1960 we can expect to see well over one-half million homes having central residential cooling equipment installed annually and that by 1965 the number will have increased to 1,500,000. The retail dollar volume in 1965 will be about \$1¾ billion if this prediction comes true, and I see no reason why it shouldn't.

16 MEN AND EIGHT BRAKES



or one man and a LOCKFORMER

BETTER LOCKS

—FASTER. One man and a Lockformer makes more Pittsburgh Locks than sixteen men working with eight brakes. And Pittsburghs made on the Lockformer are perfectly uniform . . . look like the quality work they really are . . . assemble easier and faster without further prying open by hand.

MULTI-PURPOSE

Lockformers equipped with extended shafts for Auxiliary Rolls also make Double Seams, Standing Seams, Drive Cleats and Right Angle Flanges . . . and, if equipped with the Flanging or Slitting Attachments, are power flangers or power slitters as well as lock-rolling machines. Lockformers can be set up for as many as three different jobs without change-over.

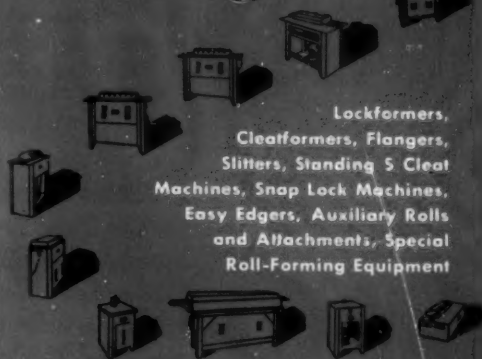
PROVEN DEPENDABILITY

There are more than 30,000 Lockformers in use today. Machines delivered over 18 years ago are still giving trouble-free service, day in and day out. Because they cut over-all fabrication costs in half, Lockformers pay for themselves quickly out of the "extra" profits they earn!

Send for your free copy of the Lockformer Catalog

THE LOCKFORMER CO.

4615 WEST ROOSEVELT ROAD • CHICAGO 50, ILLINOIS



Lockformers,
Cleatformers, Flangers,
Slitters, Standing S Cleat
Machines, Snap Lock Machines,
Easy Edgers, Auxiliary Rolls
and Attachments, Special
Roll-Forming Equipment

There is a Lockformer to Fit YOUR Needs and
Your Budget in Lockformer's Complete Line of
Lock-Rolling Equipment

the editor's notebook

(continued)

The prediction for 1965 looks very good too — year 'round residential central systems, \$312,000,000; commercial packaged cooling systems, \$189,000,000; and room air conditioners, \$435,000,000.

In his statement relating to Carrier's entry into the furnace market Mr. Wampler said, "The fact is that Carrier's Unitary Equipment Division is not basically interested in entering the residential heating business as such. But, it is tremendously interested in year 'round air conditioning, present and future, and the new furnace line is a necessity in this connection. Every man who purchases one of these units today is a first prospect for complete air conditioning two or three or five years in the future."

Sees Need for Dealer "Bedside Manner"

WE NEED a "bedside manner" was the theme of a paper presented to the Cleveland Engineering Society recently. The points made certainly apply to our industry and I'd like to quote from the paper, to wit: "As is true of all professions, engineering has three responsibilities, just as the three-legged stool has three legs. First, there is the responsibility that a profession has to itself, the second responsibility is that which the profession has to industry and society; and last, but not least, is the responsibility to national security."

Couldn't we say that our profession has the same three responsibilities? Aren't we responsible to our customers, our industry and ourselves? Of course we are and could very easily follow the



Enthusiastic reception by the public explains the higher sales frequency of the Sundstrand all-electric oil burners.

With a Sundstrand, the most modern concepts of warm air heating are realized.

... That's not enough; with a Sundstrand, initial low-cost is matched by long-span oil burner performance.

... These values and the Sundstrand reputation for the finest in oil heating add up to complete customer satisfaction. Foot or bracket mounted, all Sundstrand oil burners are listed as standard by Underwriters' Laboratories . . . and meet all state and local requirements.

A leader in oil heating for 33 years.

write to

SUNDSTRAND ENGINEERING CO.

ROCKFORD, ILLINOIS

the editor's notebook

(continued)

recommendation of this paper by developing the "bedside manner" recommended in this conclusion. In every contact with the public develop a professional dignity that will cause your customers and their associates to think highly of your opinions and have complete confidence in your recommendations. Try the "bedside manner" sometime. I believe you will find it suits our industry very well.

Why Not Push Larger Cooling Jobs?

THE MARKET for residential air conditioning isn't always for the two and three ton units that seem to creep into so many conversations among dealer-contractors. I've just learned that the Union Electric Co. (serving the St. Louis area) has canvassed the wholesalers and distributors in its territory and has come up with some interesting figures. The company finds that during 1955 the following equipment was installed in the St. Louis territory: one fifteen ton system; 26 seven and one-half ton jobs; 329 five ton; 592 three ton; 67 two ton; and 12 one and one-half ton. Thus, it would seem that there is little relationship between residential applications and the size of equipment used. The same practices are followed when estimating and selecting the equipment and the same people make the sale. Let's talk up those large jobs too.

Urges Dealers to Work At Slower Tempo

Take it easy! A good suggestion and one well worth putting into effect. What brings this to mind is an item I recently read in a consum-



**Standardized pipe, duct and fittings for
residential heating and cooling installations
Perimeter • Conventional • Gravity systems**

Write for catalog No. 55 today



Adelta Manufacturing Company, Inc.

21st & Ellsworth Streets, Philadelphia 46, Pa.



the editor's notebook

(continued)

er magazine that made me think about the tempo at which so many dealers and contractors in our industry operate. The item spoke about "manager's disease" as a name given to heart and blood vessel disorders, including angina pectoris and coronary thrombosis. This disease is prevalent among and causes premature death to executives, lawyers, foremen, doctors and others who rush about and worry too much.

Mortality of men in such positions at ages between 45 and 60 is 45 percent above that of the male population in general. Studies made at the Institute for Industrial Hygiene in Germany credit this high mortality to "working fever", inadequate weekend recreation, too few holidays, lack of proper relaxation and insufficient sleep. 'Nuff said.

'Personal Touch' Given To Convention Coverage

WHILE I was attending the recent convention of the National Heating and Air Conditioning Wholesalers, Inc. in New York I learned that many of the registrants had received telephone calls requesting them to make appointments to have a photograph made and to be interviewed. The persons making the telephone calls claimed to represent the trade press. They wouldn't divulge the name of the business paper they represented when we called them.

As you know, it's the practice of American Artisan to attend and report conventions in the field of warm air heating, residential air conditioning and sheet metal contracting on a personal basis.

meriting trust*



*Nu-Way oil burners

Meriting trust. That's how Webster defines "dependability." That's how customers describe Nu-Way Burners. Dependable components are used throughout, production run after production run.

Dependable motors. Dependable transformers. Dependable pumps. Every purchased part is built by suppliers of known quality reputations. No substitutes. Only the finest materials. In fact, some people think we carry this fanaticism about quality too far. Maybe we do. All we know is—our customers seem to like this "obsession" we have. They know they can trust Nu-Way to build burners that won't let them, or their customers, down. That is the basic fact to remember about Nu-Way Burners—they're dependable. They **merit your trust.** Nu-Way Corporation, Dept. AA-16, Rock Island, Illinois.

the editor's notebook

(continued)

When we take pictures we are proud to mention that American Artisan is getting the news.

Urges More Emphasis On Employee Training

I WAS PLEASED to learn that one of my favorite subjects — training employees for future responsibilities — got a recent confirmation of its importance. The results of a survey conducted by the American Management Association shows that more and more companies have organized programs for developing their supervisory staffs. The survey covered 460 companies of all sizes and in all types of industries, including some firms engaged in sheet metal contracting and warm air heating. The survey showed that 88 per cent of the responding firms are giving regular attention to employee development; 54 per cent said they had a systematic plan and were following it with good results.

Eighty percent of the programs reported have been in use for ten years or less, 60 percent five years or less. This bears out the recent trend and the importance attached to training programs and their value. With the rapidly expanding market for air conditioning, there is no industry with as bright a future as ours. There just can't be too many schools for training those in the industry to be able to serve the market opening up and for teaching the new employees that will be required as the industry continues to expand.

Clyde M. Barnes

EDITOR

fit 'em fast... make more money with
CHAMPION!



"Five Footer" snap lock pipe
5' lengths packed 10 (50')
per carton. 28-30 ga. 4"-5".
6"-7"-8". "Two Footer" snap
lock pipe 2' lengths packed
20' or 40' per carton. 24-26-
28-30 ga. 3" through 12".



CHAMPION 90° 4-pc. adjust-
able elbow and 45° 2-pc.
angle will speed installation
for you every time! Extra
strong... smooth, easy ad-
justment... do not come
apart. 12 to a carton.

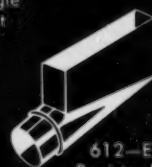
Take a tip from heating men who save
time and dollars—in the shop and on
the job—with precision-made, fast-hand-
ling CHAMPION fittings. Because
they're machine fabricated, you're
guaranteed fittings that go together
fast and accurately... giving you a
snug, good-looking installation every
time. CHAMPION fittings are com-
pletely cartoned for economical ship-
ping, easy handling, compact storage.

Remember, the CHAMPION line is
complete. For any job... for every job,
make more money with CHAMPION.

Contact your nearby CHAMPION jobber.



610—90° Angle
Register Boot

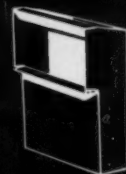


612—End
Register Boot

582—Top Take-Off
Zero Clearance



571—90° Angle
Stack Boot



561—Stack Head



614—Offset
Register Boot



CHAMPION

CHAMPION FURNACE PIPE COMPANY
211 Eaton Street • Peoria, Illinois • Phone 6-4639

The LINE that "CLICKS" for '56 is

YEAR 'ROUND *Luxaire* AIR CONDITIONING

The COMPLETE LINE of BASEMENT-UTILITY and COUNTERFLOW Units . . . Factory Engineered and PACKAGED with . . . 2, 3 and 5 Ton Cooling . . . Either AIR or WATER Cooled in the 2 and 3 Ton Capacities . . . With Matching GAS or OIL Fired Heating . . .

Designed, Engineered, Manufactured for Easier, Speedier Installation by the Heating Contractor!



5 Ton, Water Cooled Year Round Air Conditioner. Burns Either Gas or Oil. 175,000 or 140,000 B.T.U. Heating Input.



Basement-Utility Year Round Air Conditioner. 100,000 B.T.U. . . . 2 Ton Cooling. 140,000 B.T.U. . . . 3 Ton Cooling. Burns Either Gas or Oil. Air or Water Cooled.



Counterflow Year Round Air Conditioner. 100,000 B.T.U. . . . 2 Ton Cooling. 140,000 B.T.U. . . . 3 Ton Cooling. Burns Either Gas or Oil. 2 Ton . . . Air or Water Cooled. 3 Ton . . . Air Cooled Only.

SUMMER *Luxaire* AIR CONDITIONING



Condensing Unit of Air Cooled Summer Air Conditioner. 2 or 3 Ton Capacity. Is Connected to cooling Coil, shown above.

2, 3, 5 Ton WATER COOLED Units . . . 2 and 3 Ton AIR COOLED Units . . . EVERY Cooling Circuit HERMETICALLY SEALED . . .

For More Convenient, More Practical Conversion of Existing Heating Systems and Forced Warm Air Furnaces for Year 'Round Air Conditioning!



Cooling Coil of Air Cooled Summer Air Conditioner. Is Connected to Condensing Unit.



2 Ton Water Cooled Add-On Summer Air Conditioner. Available with or without Blower Compartment.



3 Ton Water Cooled Add-On Summer Air Conditioner. Available with or without Blower Compartment.



5 Ton Water Cooled Add-On Summer Air Conditioner. Available with or Without Blower Compartment.

WINTER *Luxaire* AIR CONDITIONING



Basement A.C. Furnaces. Burn Either Gas or Oil. 9 Gas Fired Sizes . . . 70,000 to 250,000 B.T.U. Input. 7 Oil Fired Sizes . . . 84,000 to 224,000 B.T.U. at Bonnet.



Winter Air Conditioner Utility Units. Burn Either Gas or Oil. 3 Gas Fired Sizes . . . 65,000 to 140,000 B.T.U. Input. 3 Oil Fired Sizes . . . 84,000 to 123,000 B.T.U. at Bonnet.

Every Wanted TYPE, SIZE, CAPACITY . . . BASEMENT, COUNTERFLOW, UTILITY and HORIZONTAL Units . . .

With Most Units Approved to Burn Either GAS or OIL with Equal Efficiency!



Counterflow Units Burn Either Gas or Oil. 5 Gas Fired Sizes . . . 65,000 to 140,000 B.T.U. Input. 3 Oil Fired Sizes . . . 84,000 to 123,000 B.T.U. at Bonnet.



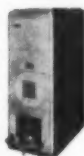
Gas Fired Horizontal Furnaces 4 Sizes . . . 80,000, 100,000, 120,000 and 140,000 B.T.U. Input.



Oil Fired Horizontal Furnaces 4 Sizes . . . 84,000, 101,000, 123,000 and 224,000 B.T.U. at Bonnet.

Luxaire

GRAVITY FURNACE, for GAS, OIL, COAL, GAS UNIT HEATERS, GAS CONVERSION BURNERS, OIL CONVERSION BURNERS, INCINERATORS



Gravity Furnaces Burn Gas or Oil. 3 Gas Fired Sizes . . . 86,000, 105,000, 130,000 B.T.U. Input. 2 Oil Fired Sizes . . . 67,000 and 89,000 B.T.U. at Register.



Gas Fired Unit Heaters. 5 Sizes . . . 60,000 to 230,000 B.T.U. Input.



Gas Conversion Burners. 3 Sizes . . . 50,000 to 250,000 B.T.U. Input.



Oil Conversion Burners. 4 Sizes . . . 0.75 to 13 Gallons per Hour.

Incinerator 3 Optional Gas Burning Combinations. Also available without Gas Burner.



With *Luxaire* You Have A Unit to Meet ANY SPECIFICATION!

THE C. A. OLSEN MANUFACTURING COMPANY . . . ELYRIA, OHIO
Luxaire
HEATING & AIR CONDITIONING UNITS



Luxaire®

AIR CONDITIONING

**... so MUCH MORE than the MOST COMPLETE
Line of ... Heating Units ... Cooling Units ...
Year 'Round Air Conditioning Units!**

Yes, Luxaire is **more** than just a complete line.

Luxaire is **the line** on which you can base your plans ... for improving your business ... for making more money ... for growing ... for making your operation "click" in 1956.

Because Luxaire is **the complete line** ... you do have the unquestionable advantage of being able to choose the right size and proper type of unit for any particular installation. And also because of this advantage, your installations are made more easily and more quickly ... with longer lasting satisfaction to your customers.

Certainly ... Luxaire units are excellent units ... excellently designed, engineered and manufactured for extra years of trouble-free operation.

But you get **even more** ... with Luxaire.

You get the distinctive Luxaire bonus of furnaces approved for Gas! ... and also approved for Oil! Because most Luxaire units burn either gas or oil with equal efficiency ... you stock less ... sell more. Your customers are insured against any change in their choice or in the availability of either type of fuel. And, in the future, when you convert the Luxaire unit that you have installed, with either the Luxaire gas or oil burner ... you make a new, additional sale and profit.

With Luxaire, you get also the benefits of constant, foresighted research ... of ingenious design with the installer always in mind ... like these new Luxaire products, developed to bring you more business in 1956:

Gas Fired Horizontal Units ... A completely new, complete line of Luxaire Gas Fired Horizontal Furnaces now makes it possible for you to install a winter air conditioning unit in locations that were not before usable. Excepti-

tionally low and compact, these new units provide you with unexcelled flexibility in installation ... with gas burner installed at the front, the back and at either end of the unit ... with flue vent installed at either the front or back ... with flue vent installed at the front and burner installed at the back, or visa versa ... with flue collar adjusted to either a horizontal or vertical position, permitting the flue pipe to be extended at any convenient angle.

Four popular sizes ... 80,000, 100,000, 120,000 and 140,000 B.T.U. input ... provide you with a heating capacity for any size of home.

Counterflow Year 'Round Air Conditioner ... With the Luxaire Counterflow Year 'Round Air Conditioner you now have a compact single-cabinet, summer-winter unit ... factory engineered and constructed for use with slab-floor or crawl-space, perimeter installations. You have a choice of air cooled or water cooled refrigerant circuits in the 2 ton unit, with air cooled only for the 3 ton unit.


5 Ton Year 'Round Air Conditioner ... With the new Luxaire 5 Ton Year 'Round Air Conditioner you have high capacity cooling combined with a choice of heating capacities ... in the same, compact cabinet. This unit is normally supplied with 175,000 B.T.U. input gas or oil burner, but is available with 140,000 B.T.U.

Finally and ... **most important** ... with Luxaire, you get **realistic prices** ... prices which are competitively adjusted to the competitive 1956 market ... **low prices** achieved through quantity manufacturing that lowers production costs ... prices that enable you to meet and match all competition.

Why not take the important step toward making your business "click" in 1956 ... now? See your nearest Luxaire jobber, today!

WITH *Luxaire* THE PRICE YOU PAY IS A COMPETITIVE PRICE ...
MADE MORE THAN COMPETITIVE BY THE EXCELLENCE YOU RECEIVE!

THE C. A. OLSEN MANUFACTURING COMPANY . . . ELYRIA, OHIO



Luxaire®

HEATING & AIR CONDITIONING UNITS

VICTOR

GAS • OIL • COAL

A Look Inside a VICTOROIL SERIES "W"

- | | |
|-------------------------------------|---|
| 1. Humidifier (optional). | 7. Blower. |
| 2. Burner limit and blower control. | 8. Blower motor. |
| 3. Protector relay. | 9. Oil burner. |
| 4. Heat exchanger. | 10. Flame inspection door. |
| 5. Fins. | 11. Barometric damper. |
| 6. Filters (throw away type). | 12. Main switch, either on furnace or wall. |
| | 13. Cleanout. |



Counter-Flo



Hi-Boy

THE *Complete* VICTOR 1956 LINE for GAS-OIL-COAL FURNACES and SUMMER COOLING UNITS

In all Hall-Neal history there has never been a more complete, more skilfully engineered, more quality built line of heating and cooling equipment. Since 1890 the name VICTOR has been famous for quality furnaces. They are the furnaces with FUEL-SAVING FINS . . . an exclusive, patented VICTOR feature. Make your 1956 line one with which you can successfully compete for any job . . . with VICTOR!

Investigate! Mail Coupon TODAY.

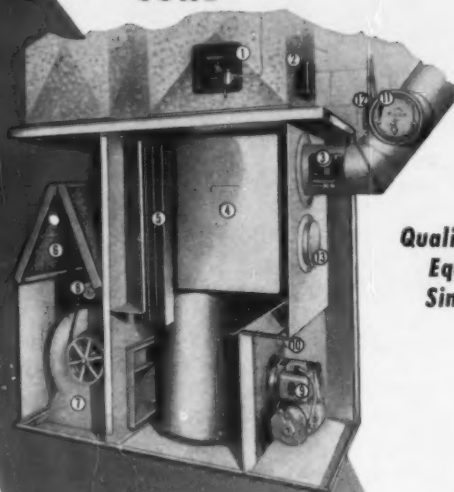
HALL-NEAL FURNACE CO. 1322-42 N. CAPITOL AVE.
INDIANAPOLIS 7, IND.

Gentlemen: Send full details on an EXCLUSIVE VICTOR GAS-OIL and COAL FRANCHISE for BIGGER PROFITS IN 1956.

Name _____

Firm _____

City _____ State _____

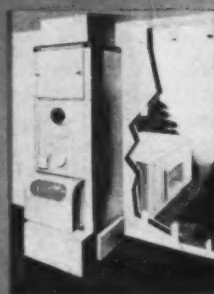


Quality Heating
Equipment
Since 1890



Central
Cooling
Companion
Basement
Model

VICTORAIRE



Horizontal
Air Cooled
Unit with
Remote Air
Cooled
Condenser

COOLING UNITS



Remote Air Cooled Condenser-Compressor
Unit With Duct Evaporator

VICTOROIL

**HEAVY DUTY OIL
HORIZONTAL UNIT**



The **DO-180S & DO-196S**

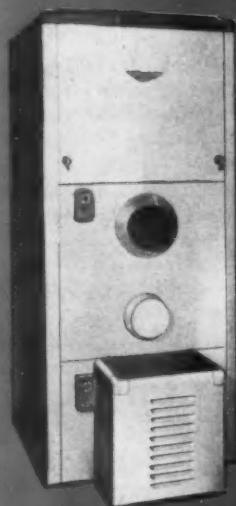
for

INDUSTRIAL & COMMERCIAL USE

Large Homes • Service Stations • Public Buildings • Big Jobs!

SAVE FLOOR SPACE

Install On or Under Floors • In Attics • Utility Rooms • Crawl Space



DG-200

**Series "D" COUNTER-FLO
for BIG JOBS Usually requiring
2 Smaller Units. Delivers
160,000 BTUs at Bonnet**

Here's a pair of VICTORS to tie to! The big space-saving VICTOROIL HORIZONTAL unit delivering 180,000 and 196,000 BTUs is especially designed for small industrial, commercial and large home installation where floor space is at a premium or where attic or crawl space installation is desired.

The *busky* VICTOR series D-200 COUNTER-FLO is designed to complete your line by meeting the increasing demand for ONE powerful Counter-flo BIG enough for today's modern slab or ranch-type homes. They are VICTOR "FIN" constructed and are **WARRANTED FOR 15 YEARS!**

Mail Coupon TODAY!

HALL-NEAL FURNACE CO. 1322-42 N. CAPITOL AVENUE
INDIANAPOLIS 7, IND.

Gentlemen: Send full details on Series "D" Horizontal Oil ☐
Send full details on Series "D" Counter-Flo ☐

Name

Firm

City State



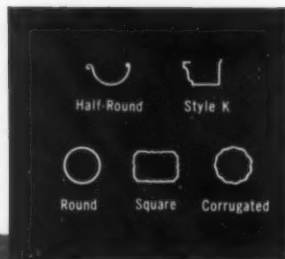
For the permanence of galvanized STEEL and
installations that stand up . . . profits that stand out!

... use *MILCOR*[®] Gutter and Conductor Pipe

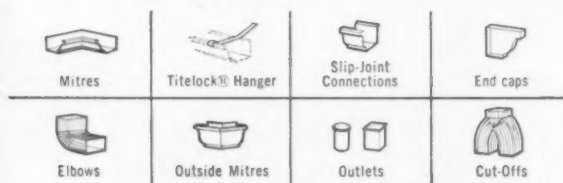
You need the *strength of steel* in gutter and conductor pipe to stand up against ladders and other construction hazards. You need the *permanence of galvanized steel* to combat the extremes of weather for years to come. You get both of these with Milcor Gutter and Conductor Pipe.

Milcor Gutter, Conductor Pipe and Accessories are precision made, fit together quickly and accurately on the job, keep your costs down.

Order Milcor Gutter and Conductor Pipe for all your jobs. Get prices from your jobber or nearest branch listed below.



You can carry a complete line of Milcor gutter, conductor pipe, elbows, and accessories



INLAND STEEL PRODUCTS COMPANY

4023 WEST BURNHAM STREET • MILWAUKEE 1, WISCONSIN
 OFFICES IN: BALTIMORE • BUFFALO • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DETROIT
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S-136

NWAHACA Plans Program for First Technical Conference

A NEW INDUSTRY service activity of the National Warm Air Heating and Air Conditioning Association will be inaugurated when the association conducts its first technical conference at the Edgewater Beach hotel, Chicago, May 24 and 25. Purpose of the technical conference is to make it possible for industry engineers to obtain firsthand knowledge of research findings that are being uncovered in the many research activities of the industry — both association and company sponsored — and which are now exerting or will exert an influence on warm air heating and air conditioning methods, systems and equipment. Papers presented at the May conference meetings will include reports of the research activities at the University of Illinois and the University of Minnesota as well as reports of association field investigations and information about new product developments that are taking place within the industry.

The conference will be open to all members of the National Warm Air Heating and Air Conditioning Association, according to George Boedener, managing director of the association. The program is being planned by NWAHACA's technical conference committee composed of

Frank J. Nunlist, Mueller Climatrol, chairman; Keith T. Davis, Carrier Corp.; Frank L. Meyer, The Meyer Furnace Co.; C. W. Nessel, Minneapolis-Honeywell Regulator Co.; and A. B. Newton, The Coleman Co., Inc. The subjects and authors of papers as well as the registration fee will be announced later.

Summer Cooling to Be Featured In 1956 Indoor Comfort Conferences

FIRST of the 1956 two-day indoor comfort conferences sponsored by the National Warm Air Heating and Air Conditioning Association was held January 9 and 10 at South Bend, Ind. This year the program features year 'round air conditioning applications and, as in last year's schools, students

D. C. Passes Equipment Installation Ordinance

THE ADOPTION of a licensing regulation that will permit dealers and contractors making air conditioning installations within the corporate limits of the District of Columbia to perform certain electrical and piping operations is the result of two years of work on the part of industry workers who were able to point out to the

(Continued on page 22)

will learn by working with practical problems in heat gain calculations and duct sizing. Attention is also given to balancing the system for the changeover from the heating to the cooling season. Following are dates and locations of the schools now scheduled:

<i>When</i>	<i>Where</i>	<i>Chairman</i>
Jan. 23-24	Chicago	George Kalvog, 855 N. Cicero Ave., Chicago 51.
Jan. 26-27	Fond du Lac	Edw. J. MacIntyre, 403 Marquette St., Fond du Lac, Wis.
Feb. 6-7	Birmingham	Geo. F. Wheelock, 3017 S. 2nd Ave., Birmingham 5.
Feb. 9-10	Atlanta	L. J. O'Callaghan, 362 Fair St., S.W., Atlanta.
Feb. 13-14	Charlotte	Bruce O. Leister, 2510 Lucena Ave., Charlotte 6, N. C.
Feb. 27-28	Louisville	Lee F. Tinsley, Sr., 2300 Frankfort Ave., Louisville 6.
Mar. 1-2	Cincinnati	G. W. Denges, 3500 Madison Rd., Oakley 9, O.
Mar. 5-6	Columbus	Newt T. Hess, 63 E. Goodale St., Columbus 8, O.
Mar. 8-9	Pittsburgh	Paul S. Agey, 850 Pennsylvania Ave., Pittsburgh 33.
Mar. 12-13	Lewisburg	W. J. Busser, Jr., Lewisburg, Pa.
Mar. 15-16	Newark	Edw. S. Franklin, 156-158 Badger Ave., Newark 8.
Mar. 26-27	Cleveland	John Petri, 6420 Woodland Ave., Cleveland.
Mar. 29-30	Buffalo	J. A. Collins, 367 Northampton St., Buffalo 8.
April 2-3	Albany	Earl R. Welker, 98 Fuller Rd., (Colonie), Albany 5, N. Y.
April 5-6	New Haven	A. J. Alderman, 169 Derby Ave., New Haven 6, Conn.
April 9-10	Indianapolis	Al Nemec, 614 E. Ohio St., Indianapolis.
April 18-19	Minneapolis	Geo. Zingsheim, 301 N. 7th St., Minneapolis.
April 23-24	Denver	J. H. Singleton, 1830 Market St., Denver 2.
April 26-27	Salt Lake City	Alan E. Huish, 960 S. Main St., Salt Lake City 4.

Sees 50% Aluminum Expansion in Five Years

THE aluminum industry can be expected to expand at least another 50 percent over the next five years, according to Dexter M. Keezer, vice president and director, Department of Economics, McGraw-Hill Publishing Co. Reviewing the general business outlook for members of the Aluminum Association at a recent meeting, Mr. Keezer said that prospects for the aluminum industry are even brighter than for business generally.

Your
BRIGHT NEW FUTURE

Starts
right
now...



...if you're a **Perfection dealer!**

Whether they're shiny silver dollars or the favorite "long green"... there'll be **MORE**
OF THEM... MORE OFTEN for every dealer who handles the Perfection line!

Because

...Perfection now offers the most complete, easiest-to-sell, easiest-to-install line of central air conditioning in the industry!

You'll be sitting in the driver's seat in 1956. This is the year when central air conditioning comes into its own . . . and with Perfection you'll have everything you need to SELL! Perfection units, either air-cooled or water-cooled, are available in 2, 3, 4, 5 and 6 tons for residential use . . . and an exclusive new method

makes Perfection the easiest and lowest cost system to install. You can go after the commercial market, too, because Perfection offers packaged cooling units in sizes up to 40 tons for this field. And . . . if you're interested . . . you can get famous Prop-R-Temp heat pumps from Perfection. A good deal on water heaters, too!



Because

...Perfection is still the only heating equipment with the real exclusives in the business today...Regulaire and the 3 stage fire!

Even competition admits that Perfection's Regulaire is the greatest selling feature to hit the furnace business since the invention of the thermostat. Regulaire automatically provides constant warm air circulation . . . the only method

that insures full time comfort in every heating installation you make. And the combination of Regulaire and Perfection's 3-Stage Fire alone puts you far ahead of competition in the furnace market.



and
Because

...Perfection has built its entire 1956 advertising and Sales Promotion around YOU...the man who really carries the mail!

We know the job you do as a dependable installer is just as important as the equipment itself. That's why all of our effort in 1956 will be to let the buying public know that choosing the right dealer is the most important step in getting the most comfort from a Perfection furnace. Perfection's promise for '56 is to help make your job easier and more profitable . . .

with consumer selling helps, builder helps, credit helps and many others. Before you make your commitments for 1956, let your Perfection distributor show you what Perfection has in store for you, or contact us direct. GO with the line that's GOING PLACES! Perfection Industries, Division of Hupp Corporation, Cleveland, Ohio.



talk to **Perfection**

25,000,000 happy Perfection owners can't be wrong!

Short Course Committee Schedules Four-Day Schools

COLLEGE short courses in heating and cooling applications are conducted jointly by a number of colleges and the National Warm Air Heating and Air Conditioning Association. The four day schools offer the option of selecting one of the three following problems according to your interest:

A small residence, figured with or without basement. This plan will be used for the basic heating problem. Emphasis will be placed on figuring heat losses. Perimeter heating as well as standard pipe systems will be discussed. Manuals 3, 4, 7 and 10 will be used in these classes.

A large ranch type residence, figured with or without basement. This plan will be an advanced problem of heating, or combination heating and cooling. Manuals 9, 10 and 11 will be used to assist in the layout of these problems.

A commercial building. Design studies will be made for heat gain and air distribution for commercial cooling and proper ventilation.

District of Columbia Adopts Ordinance

(Continued from page 19)

Board of Commissioners that master mechanics and journeymen of the warm air heating and air conditioning industry are the most capable tradesmen to do the necessary wiring and piping for air conditioning equipment.

The new regulation permits the connection of water lines from a shut-off valve to a trapped drain, both of which have previously been installed by a licensed plumber. Electrical connections can be made from a fused switch box that has been connected by a licensed electrician to all components of the air conditioning equipment.

College short courses have been scheduled as follows:

Mississippi State College, Jan. 16-19.
Oklahoma A & M College, Feb. 20-23.
Purdue University, Mar. 7-10.
Penn State University, Mar. 28-30.
Michigan State College, Apr. 2-5.
Syracuse University, Apr. 4-6.
North Dakota State College, Apr. 9-12.
Iowa State College, Apr. 16-19.
Long Island T & A Institute, University of the State of New York, Apr. 23-26.

More Steel May Be Available in '56

JOSEPH L. BLOCK, president, Inland Steel Co., predicts that production of steel will probably catch up with demand in the second half of 1956. "Any drop in production should not be very great," according to Mr. Block. "The total for 1956 will probably be very close to the 1955 116-plus million tons, with an annual rate of 90-92 percent of the new capacity. If this pattern should develop, steel will, of course, be somewhat easier to obtain in the summer and later months of the year."

HHFA Says Housing Picture Looks Good

HOUSING and Home Finance Administrator Albert M. Cole recently told the Washington committee of the National Association of Real Estate Boards that "the housing picture is a good picture. The moderate check on new housing starts will not in the long run change that picture." Mr. Cole said that the moderate restraints on housing credit "should not be regarded as rigid or permanent." He stated that restraints were imposed when signs of an inflationary trend were noted, but that the agency is "keeping a close watch on the credit situation."

FTC Schedules Hearing on Trade Practice Rules

THE OPPORTUNITY for all persons, firms or organizations having an interest in the proposed trade practice rules for the air conditioning contracting industry to express their views has been made by the Federal Trade Commission. Suggestions, objections and other pertinent information must be submitted by letter, brief or other communication to the Federal Trade Commission, Washington 25, D. C. not later than January 20, 1956.

The opportunity to be heard orally on the matter will be afforded those wishing to appear in person at 10 a. m. January 20, 1956, room 332, Federal Trade Commission Building, Pennsylvania Ave. at Sixth St., N. W., Washington, D. C.

After due consideration of all matters presented in writing or orally, the commission will proceed to final action on the proposed rules.

Bright Outlook For Business in '56

BUSINESS this year will be even better than last year, with greater output, higher wages and higher prices in prospect, according to the forecasts of 201 leading economists polled by F. W. Dodge Corp. in its annual survey of economists' opinions. The poll shows the economists generally agreed that total output, measured by gross national product, will rise to a peak in the middle of 1956.

Dr. Smith said that the economists showed a high degree of unanimity on most points. "For example," he said, "four out of five of the economists expect this year's gross national product to be higher than the mid-1955 level. In addition, 84 percent of the panel expect personal consumption expenditures this year to be above 1955 levels; and more than 90 percent expect manufacturing wage rates to increase this year."

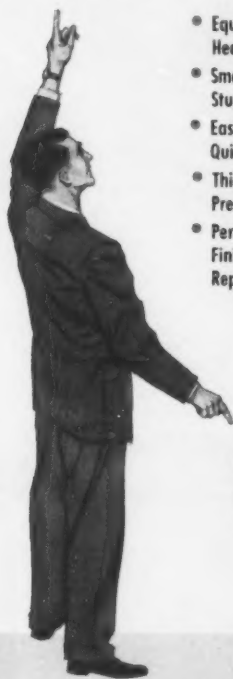


WHAT'S NEW OVERHEAD FOR DRAFTLESS COMFORT?

NEW *Lima* Series 65

ROUND STEP-DOWN CEILING DIFFUSERS

A New High In Quality
At A Low Unit Cost



- Equally Efficient for Heating and Cooling
- Smartly Styled and Sturdily Built
- Easily Installed and Quickly Balanced
- Thick, Spongy Gasket Prevents Air Leakage
- Permanent Light Beige Finish Saves Repainting Cost

There's plenty of reasons why you'll be way ahead to install this new Lima Round Ceiling Diffuser on your next overhead heating or cooling job.

The Lima Series 65 has smart good looks and built-in features you and your customers can see. It is made in the modern Lima factory under exacting quality standards. But more important is the Lima-engineered design which assures proper air diffusion for draftless comfort throughout the entire working area.

Lima's step-down rings have curved contour without straight edge for maximum free area and efficient air distribution at correct angles to induce recirculation of room air and eliminate ceiling streaks.

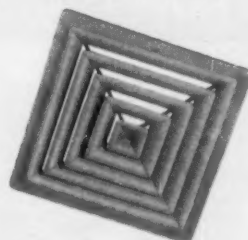
Proper installation is easy and quick with the Lima installation ring or built-in mechanical damper. Exclusive balancing control feature permits fast balancing of system. The permanent light beige finish saves repainting cost.

Immediate delivery in 7 popular sizes
Ask your jobber or write direct for Bulletin No. RD-156

*Still The Finest for
Beauty and Performance*

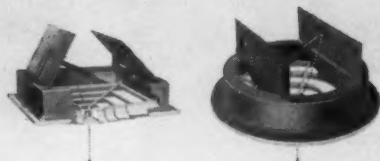
Lima Series 60

SQUARE STEP-DOWN CEILING DIFFUSERS



The modern square design matches the symmetry of acoustical tile or square block ceilings for the ultimate in beauty. Tiers of step-down vanes provide maximum free area and assure the most efficient air distribution for heating and cooling without causing drafts.

Available in 6 sizes with Lima's beautiful permanent light beige finish.



Built-in spring-loaded butterfly dampers provide simple fingertip volume control and positive air shut-off. Lima "Balancing Bell" control feature for easier balancing.

Lima Register Co.
Lima, Ohio

Sold exclusively through heating wholesalers and manufacturers.



Famous Name and
FULL LINE

simplify

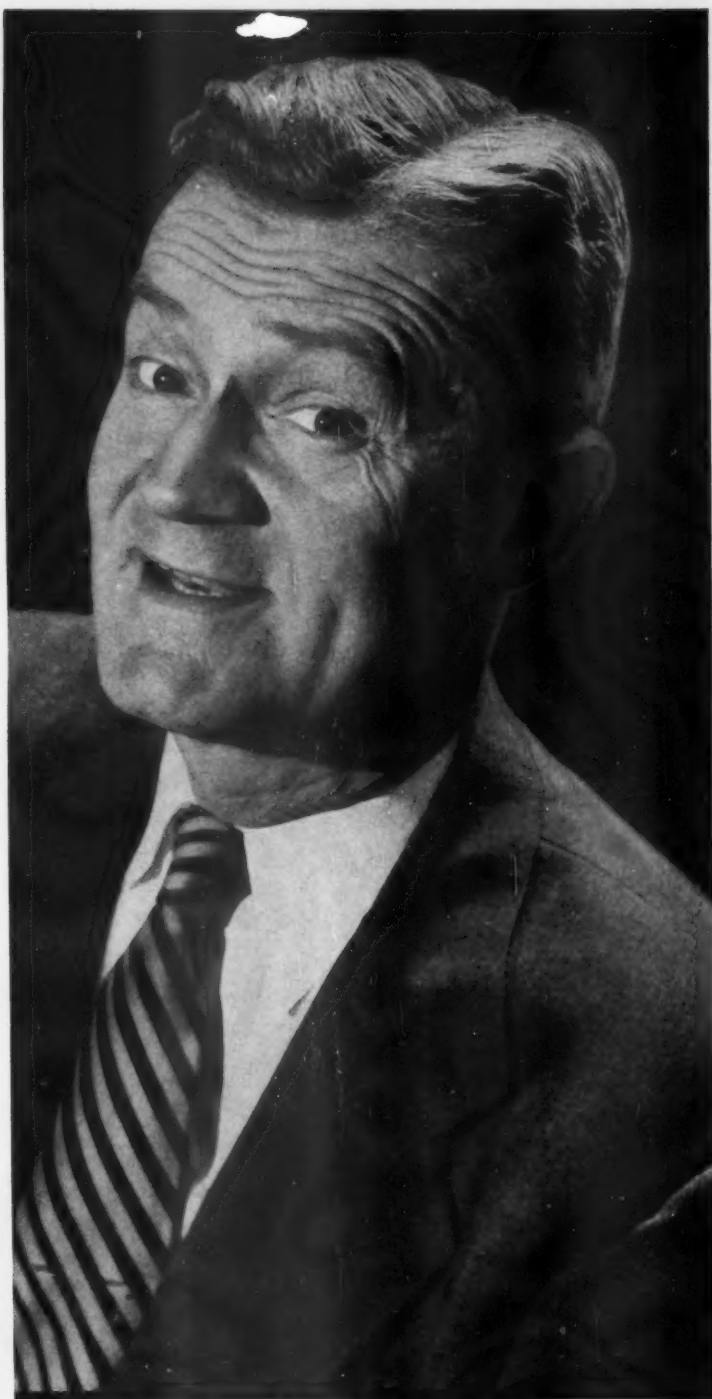
your selling!

Why don't you join American-Standard's dealer profit program?



You can find the right type and size of unit in a jiffy. American-Standard's color-coded speed-indexed catalog is Copyright 1955 by American Radiator & Standard Sanitary Corporation

the industry's easiest to use. See, also, American-Standard's powerful new line-up of advertising-merchandising aids.



Warm air heating and air conditioning jobs are easier to plan . . . simpler to sell . . . when you specialize in the installation of *American-Standard* equipment.

Famous name! Synonymous with fine quality and fair prices. You get your order signed faster . . . have more time for more sales.

The American-Standard line is *complete* . . . offers exactly the right unit for every type of installation.

WARM AIR HEATING: Basement, utility, counterflow and horizontal models . . . full range of capacities.

SUMMER AIR CONDITIONING: Add-on units, residential and commercial blower-equipped units, and new outdoor *air-cooled* units with vertical, counterflow, horizontal air-flow or blower-equipped evaporators.

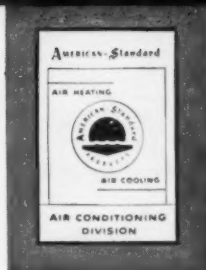
YEAR 'ROUND AIR CONDITIONING: Eleven heating-cooling size combinations equipped for gas or oil-fired heating. Electrostatic air filtering units for every size and type of application. Just pick up your phone—your nearby American-Standard Air Conditioning Distributor is ready to give you fast service. Call him right now for full details about—

Indoor Weather-Conditioning
TRADEMARK

UNITS BY AMERICAN-STANDARD

EVERYTHING for
air conditioned comfort

Warm Air Heating
Summer Cooling
Year 'round Units
Electrostatic Air Filters



AMERICAN-Standard
AIR CONDITIONING DIVISION

ELYRIA, OHIO

American Radiator & Standard Sanitary Corporation

J.P. MONEYBAGS
HEATING & COOLING

SAY J. P., YOU KNOW
MORE ABOUT
AIR CONDITIONING
THAN ANYBODY
...HOW COME?

Well, Sam...



• I'll Tell You . . .

"The way I look at it, you've really got to know your product to make good in *any* business, but it's even more important in the heatin' and coolin' business. And son, there's only one place to learn *all* about this business and that's at the factory where the equipment's made . . . from the men who make it. I'm talkin' about the Armstrong Heating and Air Conditioning "Service-Master" schools at the factory. Sure, I learn something new every time I put in a unit or make a service call, but it would've taken me years and years in this business to learn all I did at the Armstrong school I went to. Why, we tore those units clear down and then put 'em back together, piece by piece. And let me tell you, Sam, that's hard work—they really throw the book at you. But I wouldn't trade one minute of it for anything! Yes sir, son, that's how I built this business . . . knowin' more about it than my competitors."



"**Say,** that makes sense to me! I'm gonna check with that Armstrong wholesaler and see when the next school is!"

And why don't you? Your Armstrong wholesaler can give you the exact date and the whole money-making Armstrong story. Call or write today!

Yep, it sure is nice bein' an Armstrong dealer.

just look at all these advantages...

- * A complete line of furnaces and air conditioners
- * Wholesalers who do your stocking for you
- * National advertising in top consumer magazines
- * Prospect-catching promotional material
- * Service and product meetings in the field
- * Dealers heating and air conditioning schools at the factory
- * And you're selling quality equipment



YOUR ARMSTRONG WHOLESALE

Armstrong Furnaces

AND AIR CONDITIONERS
COLUMBUS 8, OHIO

ready to assist you . . . all-ways

THE MARK OF QUALITY

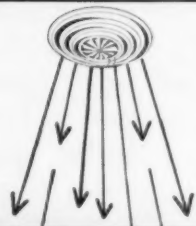
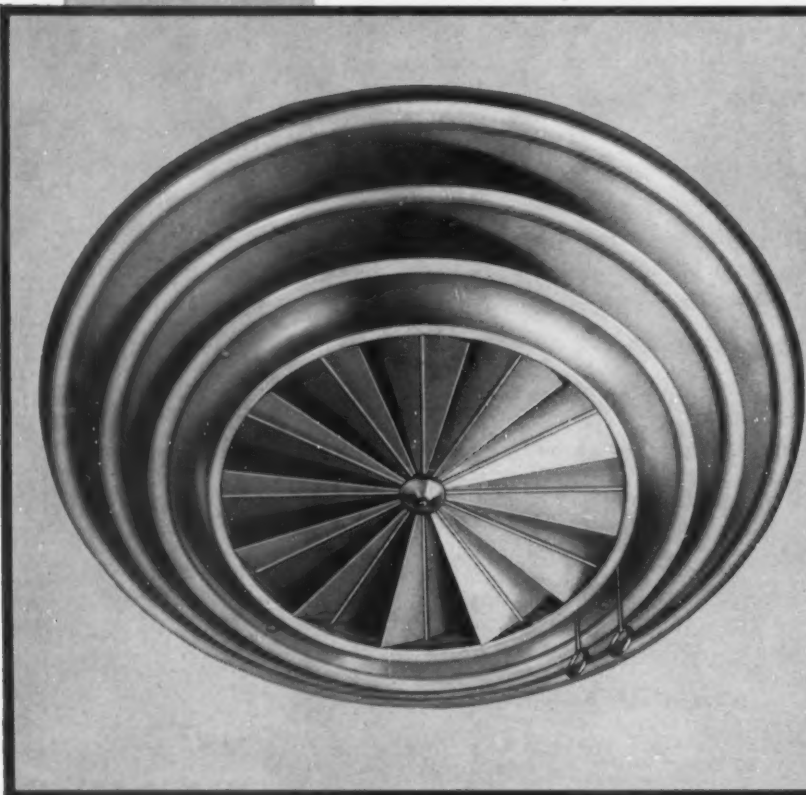


uni-flo

ENGINEERED AIR
DISTRIBUTION

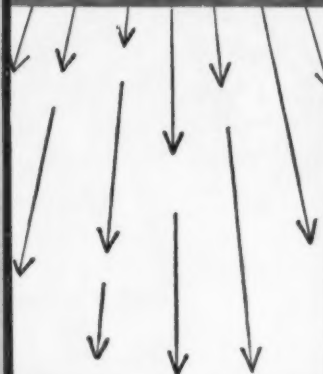
New Venturi-Flo Diffuser for high ceiling applications . . .

. . . complete flexibility for effective air distribution in factories, gymnasiums, auditoriums, garages, churches, lobbies . . . handles heated or chilled air



UP TO 50-FOOT
DOWNWARD THROW

at 40° F temperature
differential (greater
with less temp. diff.)



COMPLETE CONTROL of the vertical air pattern for spot heating, or for heating large areas to meet comfort requirements, is provided by the BP Venturi-Flo Diffuser. Adjustable vanes of the pattern control permit full variation of the air patterns from vertical to horizontal . . . adjustable from the floor or through the duct from the crawl space above the ceiling.

For engineering excellence, from product development to product application, come to . . .

LIKE ALL UNI-FLO EQUIPMENT, this new pioneering development has the rugged construction you can depend on . . . the efficient diffusion which assures owner satisfaction . . . the authoritative performance data you can use with confidence. Get complete specifications from your nearby Field Office, or write us . . . today!

Barber-Colman Company

Dept. A, 1106 Rock St., ROCKFORD, ILL., U. S. A.
Field Offices in principal cities



Washington Letter

By Arnold Kruckman

CONSTRUCTION FIGURES showed an increase for November after dipping slightly in October, according to F. W. Dodge Corp. The November grand total was \$1,796,787,000, up 20 percent above November of 1954, and the highest November the corporation has ever reported. Totals for the month were: residential, \$725,712,000, up 2 percent; non-residential, \$662,608,000, up 35 percent; utilities and public works, \$408,467,000, up 37 percent. Totals for the first 11 months of the year were: residential, \$9,474,053,000, up 22 percent; non-residential, \$7,770,004,000, up 21 percent; utilities and public works, \$4,580,466,000, up 21 percent.

According to the U. S. Department of Labor's Bureau of Labor Statistics, construction in 1956 is expected to break the 1955 record. Substantial gains are anticipated in private non-residential and public construction, while new housing, although slightly below the 1955 volume, is expected to continue at a high level. Private nonfarm housing starts in 1956 are estimated at about 1,200,000 units — 100,000 fewer than in 1955.

EFFECTIVE LAST FALL the discount rates of the Federal Reserve Banks of New York, Chicago, San Francisco, Cleveland, Philadelphia and Atlanta were advanced another $\frac{1}{4}$ percent to $2\frac{1}{2}$ percent. The other Reserve Banks followed suit within a few days and by the end of November the $2\frac{1}{2}$ percent rate applied uniformly throughout the country. This makes a one percent rise since early April and creates the highest discount

rate level in twenty years. In the longer perspective, on the other hand, a $2\frac{1}{2}$ percent rate is a moderate charge for borrowings from the Federal Reserve. Previous to 1930, discount rates as low as this were unknown in the United States.

It may be noted that the action of the Federal Reserve Banks in raising the discount rate is in one sense a business forecast. Obviously they did not fear a downturn in the near future, when they acted to tighten money in the interest of business stability.

The increase in discount rate was intended to restate and reinforce the policy of credit restraint ushered in last summer by the advances in discount rates from $1\frac{3}{4}$ to $2\frac{1}{4}$ percent. One factor Federal Reserve officials took into account was an apparent weakening of the reluctance of banks to borrow at the $2\frac{1}{4}$ percent rate. This, combined with recovering bond prices, strong corporate demands for shorter term U.S. obligations, and expectations of policy reversal, had given the money market an easier feel. Bank loans, after a period of hesitating advance in September and October, tended to accelerate even though increased borrowings from the Federal Reserve were needed to accommodate the loan expansion. During November the main pressure to increase borrowings was felt by the New York banks which, as often happens when money rates rise, experienced deposit losses as national corporations drew on reserve funds to finance purchases, cover increased local payroll accounts, or acquire short term investments.

Everyone — from the Federal Re-

serve and Treasury authorities down to the smallest financial institution — is having to learn how fluctuating credit conditions bear upon various classes of money rates.

Federal Reserve Board Chairman William Martin testified November 28 before a subcommittee of the Senate Banking and Currency Committee concerned with the effects of the policy of credit restraint on home-building. It is the Government's collective endeavor, he said, to prevent another 1929 if it is possible to do so: "Under prevailing conditions demands for funds are running far ahead of the supply of savings. To meet these demands by creating new supplies of money through the commercial banking system with Federal Reserve assistance would invite dangerous inflationary repercussions throughout the entire country."

As Treasury Undersecretary W. Randolph Burgess described the housing situation: "In times like these, with business activity straining at capacity, we cannot run the inflationary risks of manufacturing money through bank credit to encourage a level of housing starts that probably could not be sustained because of shortages of labor and materials. This would only result in further price increases."

Meanwhile, current business and credit statistics indicate that the immediate problem remains one of containing a boom that threatens to extend spiralling increases in wages and prices. As a matter of fact, if we did not have a farm problem of falling food prices, we would already have a problem of a rising cost of living.

(Continued on page 32)

RICHMOND solves your '56 sales problems... *Automatically*



featuring
the four
"Budgeteers"

"Top Quality Heating
at Budget Prices"



Budgeteer Series

Type LG-16 Winter Air Conditioner

Steel, Gas-Fired, Low-Boy

Capacities—70,000, 90,000, 110,000 BTU/hr. Input

Only 42" high for ease of installation in any type basement or partial-basement home. Low height makes it particularly suitable for split-level homes.

Available in oil-fired models, type LO-61.



Central Cooling Unit

Capacities—Type RA Air-cooled—
2 and 3 tons

Type RW Water-cooled—2, 3 and 5 tons

Every unit chart tested under A.S.R.E. conditions for trouble-free field operation. Exclusive design uses motor with lower horsepower rating to cut operation costs up to 20%.



"Suburbanite"

SH-G Winter Air Conditioner
Steel, Gas-Fired, Low-Boy

Capacities—85,000, 110,000, 140,000,
175,000, 220,000 BTU/hr. Input

Quality unit for automatic, quick, clean, comfortable heat. Attractive casing looks good in finished basement or recreation room.

Oil-fired model, SH-P, available in five sizes.



SG Gravity Furnace
Steel, Gas-Fired

Capacities—70,000, 90,000 BTU/hr. Input

A well-built unit for economy homes that provides automatic heating at lowest cost. Finest quality controls; simplified control set-ups; large, durable heating element; large combustion chamber; welded construction.

with a complete automatic line—low-boy, high-boy, counter-flow, horizontal, gravity, steel and cast iron heating and cooling units!



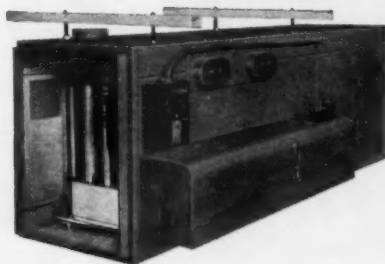
Budgeteer Series

Type VG-36 Winter Air Conditioner
Steel, Gas-Fired, High-Boy

Capacities—70,000, 90,000, 110,000
BTU/hr. Input

A.G.A. approved for 1" clearance. Ideal
for closet or alcove installation.

Available in oil-fired models, type VO-71.



Budgeteer Series

Type SA-60 Winter Air Conditioner
Steel, Gas-Fired, Horizontal-Suspended

Capacities—60,000, 80,000, 100,000,
120,000, 140,000 BTU/hr. Input

Shipped completely assembled with controls,
including thermostat for easy, quick installation
in attic space, crawl space or
suspended in a basement or utility room.

Available in oil-fired models, type AO-91.



Budgeteer Series

Type CG-46 Winter Air Conditioner
Steel, Gas-Fired, Counterflow

Capacities—70,000, 90,000, 110,000
BTU/hr. Input

For basementless type homes . . . popular
for perimeter heat systems.

Available in oil-fired models, type CO-81.



GHA Winter Air Conditioner
Cast Iron, Gas-Fired, Low-Boy

Capacities—Single units—75,000 to
175,000 BTU/hr. Input

"Twin units"—200,000 to 300,000 BTU/hr. Input

Deluxe basement type heating unit for any size
home. Twin units are covered in a single
casing and operated by one set of controls.

free bulletins available

Descriptive literature covering basic technical
details, rough-in dimensions, etc., is available in
bulletin form for each of these units. For copies,
use the handy coupon or write.



All Richmond
furnace casings
"Duridized"
for superior
bond and finish.

*Duridine—
American
Chemical
Paint
Company.

RICHMOND



affiliates of Reynolds Metals Co.

Richmond Radiator Company
18 Pearl Street, Metuchen, New Jersey

Please send me descriptive literature on the following Richmond
units that I have checked.

☐ LG Budgeteer ☐ CG Budgeteer ☐ SH ☐ GHA
☐ SA Budgeteer ☐ VG Budgeteer ☐ SG ☐ RA

NAME _____

COMPANY _____

ADDRESS _____

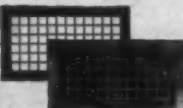
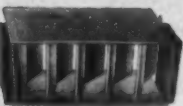
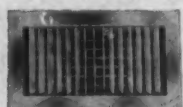
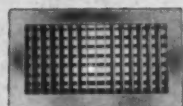
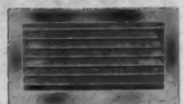
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We are ☐ wholesalers ☐ contractors.

AA-2

GENERAL

the complete Quality line of



REGISTERS and GRILLES

for commercial cooling and ventilating

GENERAL REGISTER — a name now known thru the industry for consistent quality — production-line quality of the standard of the sales sample.

A leader of the grille manufacturing field, with the finest of high-production, precision-tooled facilities, geared for volume output.

A product with the most advanced design features, including:

- Smooth, Solid Welded Frames
- Everything Streamlined
- Handsome Prime Coat Finish
- Original Silentite Damper
- Removable Damper Boxes
- Positive Stop Damper Setting

Investigate the Line that's "Second to None"!



WASHINGTON LETTER —

Prices of industrial products and services have been pushing upward as they naturally do when available manpower becomes the limiting factor on production.

THE ESTIMATED OUTPUT of goods and services during the year 1955 will total about \$387 billion. This is about seven percent higher than the record year of 1954. The trend indicates that 1956 will see business spending at a rate comparable with 1955 but with an eye to any sharp reduction in consumer spending, which is the big market, and government spending at a state and local level on an increase over 1955.

FEDERAL STATISTICIANS feel that more should be done to acquaint the rank and file of business men with the worth of the data the government agencies collect. Some \$60 million of federal funds is spent annually in gathering and compiling statistical information. Large companies make extensive use of such data. Organized promotion of their use should be undertaken, federal statisticians feel.

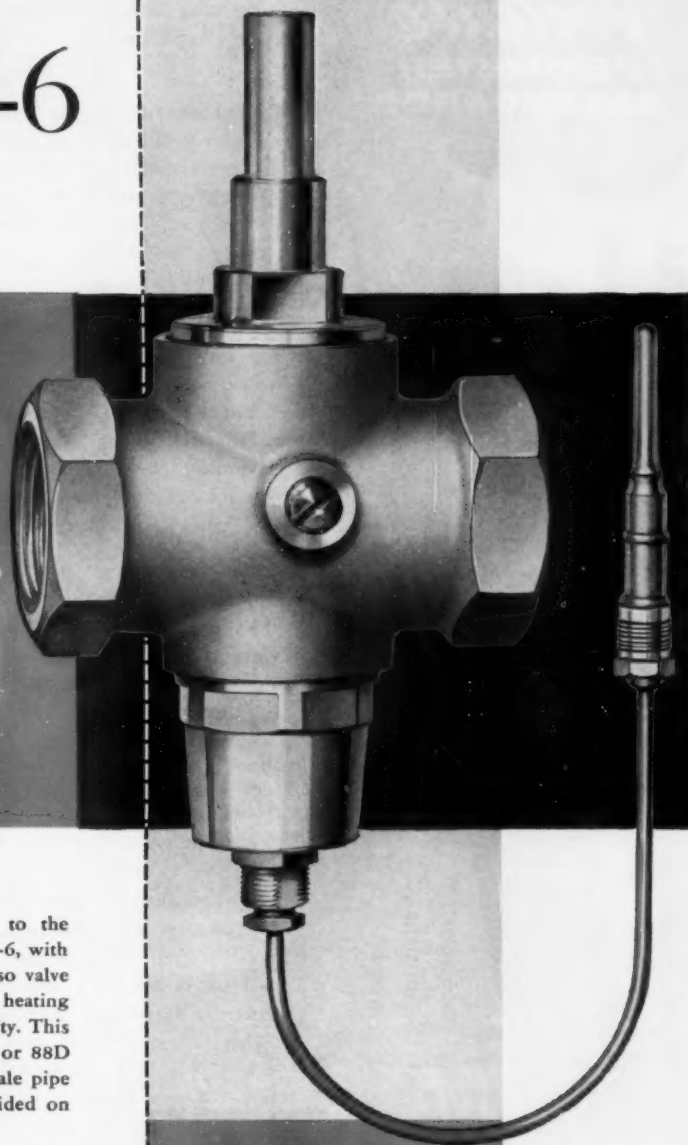
IT IS REPORTED that President Eisenhower is interested in some minor changes in the Taft-Hartley Act. He would like to see a "Domestic Point Four" program to aid areas of chronic labor surplus.

THERE IS A PLAN now making its way through Congress to provide more money for public housing projects and to extend the 1957 deadline on GI loans. Any faltering in the construction boom will be enough to encourage the enactment of these proposals.

THE FATE OF the planned proposals for disaster insurance and health insurance programs is uncertain at this time; however, there is the likelihood that some type of program will develop and be underwritten by private

No. 807-6

A NEW LARGE CAPACITY **BASO** VALVE



Now, we have added another member to the famous family of Baso valves—the Model 807-6, with a capacity of 270,000 Btu/hr. This new Baso valve is the automatic pilot you need for central heating units and other gas appliances of large capacity. This valve uses any thermocouple of the Nos. 80 or 88D MGSCO Series. Inlet and outlet are 1" female pipe thread. A $\frac{1}{8}$ " F.P.T. pilot tapping is provided on each side of the body.

The Model 807-6 Baso valve is a straight through valve with a cast aluminum body, replaceable reset and power unit assemblies for ease of maintenance, and aluminum and stainless steel internal parts in the gas stream for high resistance to corrosion.

You'll appreciate the Model 807-6's clean design, sturdy construction, and Baso dependability. It's a real sales asset to your line of modern gas appliances. Investigate it, today.

Write for
new Catalog
now available.



MILWAUKEE GAS SPECIALTY CO.

DEPT. AA-7

MILWAUKEE 1, WISCONSIN

HEAT OR COOL WITH

Vectaire

**PERIMETER
BASEBOARDS**

World's most Beautiful baseboard • **The IMPERIAL**
styled by **VECTAIRE** • priced to sell

Fits flush with wood baseboard
Available in 5' and 10' lengths
"Push button" heat control

Complete line of warm air base-
boards, pipe ducts and fittings.

WRITE FOR FACTS AND FIGURES

VECTAIRE MFG. CO.

Melrose, Mass.

WASHINGTON LETTER —

companies with a guarantee by the federal government.

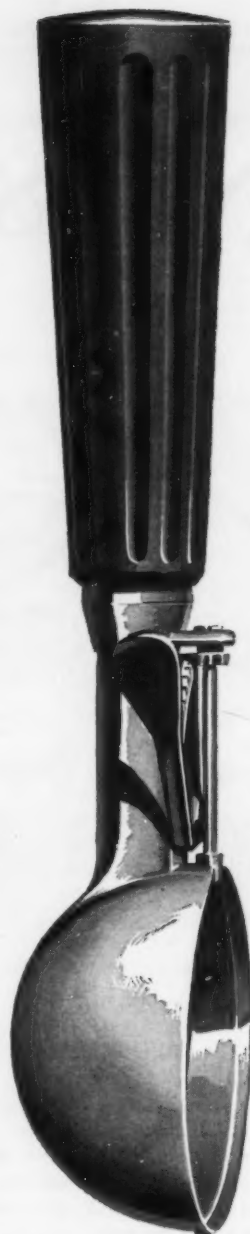
THE DIRECTOR OF the Reactor Development Division of the Atomic Energy Commission believes that by 1962 ten percent of the new power capacity will be obtained from plants using nuclear energy.

TAX RELIEF in 1956 is not going to be too favorable to business, although vote-conscious leadership in both political parties will probably try to arrange for lower tax rates for individuals, particularly those in the lower income brackets.

THE BUDGET is going to be hard to balance in the fiscal year of 1957 if the Treasury Department's views come true. They expect less revenue in taxes and a higher rate of spending for public works and the farm program.

MANY PRODUCTION failures can be traced to failure to give the same attention to developing an efficient work force that is given to developing efficient work methods, according to Fred W. Erhard, assistant director of the U. S. Department of Labor's Bureau of Apprenticeship. "Three basic elements must be considered," he said, "in planning training programs. These are how to teach the skills required, how to develop job judgment, and how to provide the necessary related technical information." He pointed out that "we in the Department of Labor can help industry solve its skilled manpower problems. We can promote training, assist with technical problems, and provide facts and figures, but in the last analysis it is up to the industry to do the job of training workers."

Services of the Bureau of Apprenticeship's field representatives are available to any employer or labor group needing assistance in developing training programs, he said.



**Rheem has scooped all
the others for '56! . . .**

with something mighty cool
in air conditioning

Watch for complete details
next month

You can rely on





Preassembled Models,
gas and oil, lobby and
hiboy



Summer-Winter
Air Conditioning, gas
and oil, lobby and
hiboy



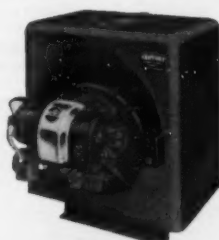
Winter Air Conditioners,
gas and oil, lobby and
hiboy.



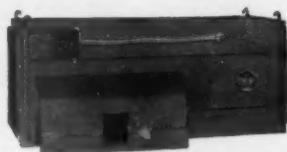
Commercial Units, oil,
lobby



Gravity Units, oil and
gas



Midget Boiler and
Water Heater, oil



Horizontal, gas and oil

Counterflow Units, gas
and oil



Conversion Oil Burner



Conversion Gas Burner

*the right unit for
every prospect*

CENTURY

HEATING

COOLING

There is a Century gas or oil unit of the size, shape and capacity needed by any prospective customer. And each of the many Century units has the famous Century Engineered quality. Smart, modern, functional design, round-cornered cabinet beauty makes sales easy . . . your profits big. And Customers want the silent efficiency offered by Century's Summer-Winter Air Conditioning. They can definitely be shown that the beauty of the Century line is more than skin deep!

We will pay you to inquire about Century — the heating and cooling line that's on the move.

CENTURY

ENGINEERING CORPORATION

CEDAR RAPIDS, IOWA

AA

Please send more information on the complete Century line, to:

Company _____

Attention _____

Address _____

City _____ State _____

here's what heating and ventilating contractors say about INLAND TI-CO®

Galvanized Steel



... says James N. Johnson, Shop Supt. of The Austin Sheet Metal Co., Chicago, Ill. "Ti-Co keeps our labor costs down! When you're the sheet metal contractor for large housing projects involving hundreds of homes, such as the Brynhaven development in Elmhurst, it's necessary to keep a large inventory of fittings in stock. Mass production of sheet metal fittings can be costly if you're having trouble with cracking and flaking of the "iron". That's why we like Inland's Ti-Co. We never have to waste time and money doing an intricate fitting over again because Ti-Co's coating never comes off."



... says P. W. Olmen, President of Jamar-Olmen Co. and W. A. Kuechenberg, President of R. B. Hayward Co., co-contractors of the sheet metal work on Chicago's new Prudential Building. "We used Ti-Co exclusively for all the duct work for air handling in the Prudential Building. Over 1,000 tons went into the job in all ... the largest single air handling sheet metal job ever undertaken in Chicago. With Ti-Co we knew we could depend on getting uniformity of coating and base metal."



... says Maurice L. De Wulf, heating contractor of Roselle, Illinois. "Ti-Co Galvanized sheets cut my fabrication costs 20 to 25%! Figure for yourself what it costs to form a 10-foot heating duct with a Pittsburgh lock seam. Then if the zinc coating flakes or peels along the seam—just double the cost! The job has to be done over, and though you may be able to salvage some of the material, you can't salvage those wasted man-hours."





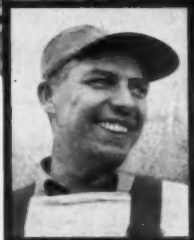
... says Mr. Earl Rocky, Supt. of O. A. Wendt Co., Chicago, Ill. "I wouldn't use anything but Ti-Co in my shop. We have been using close to 500 tons of Inland Ti-Co per year for the past several years and I have yet to have a sheet flake on me. Even on the lockseamer, and we make our seams especially tight, Ti-Co performs beautifully. Ask any of the boys in my shop and they'll tell you the same thing."



... says H. G. Prizant, Owner and Manager of H. G. Prizant Co., Chicago, Ill. "We depend on Ti-Co for our profit. Take this intricate installation in the new University of Illinois Dentistry Building, for example. Although the galvanized steel cost less than \$10, there was probably about \$250 worth of labor in this piece. If the sheets cracked along the lock seams, or even if their zinc coating had flaked off severely, it would have meant re-doing the entire job. With Ti-Co we don't have to worry about re-doing jobs because of steel failure."



... says Fred Rickey, Supt. of F. R. Inskip & Co., Champaign, Ill. "Ti-Co Galvanized sheets save us 50¢ a sheet. We used to waste a lot of time and material with conventional galvanized before they were ready for pattern layout. We lost about ten minutes shop-time on the shear and about a pound of metal. Then we had to refigure the sheet size to make a layout. We don't have this waste using Inland Ti-Co sheets. They're always uniform. We make layouts and shear Ti-Co as delivered. And we save at least \$2,500 a year."



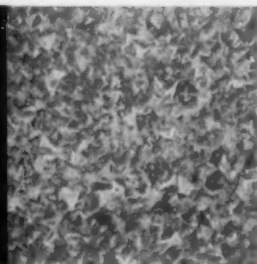
Yes, more and more sheet metal contractors throughout the middle west are learning the tremendous difference between Ti-Co and just any conventional galvanized sheet. Inland Ti-Co is made by a special continuous galvanizing process which eliminates the brittle iron-zinc layer that causes conventional galvanized coatings to flake.

Ask your dealer for Inland Ti-Co and look for this stencil on all your galvanized sheets.

INLAND STEEL COMPANY

38 South Dearborn Street • Chicago 3, Illinois

Sales Offices: Chicago • Milwaukee • St. Paul • Davenport
St. Louis • Kansas City • Indianapolis • Detroit • New York





**Idea Exchange
for
Dealers, Contractors**

Shop-Made Auto Draws Crowds to Displays

"YOU'VE GOT TO KEEP your name constantly before the public if you don't want them to forget you," says Michael A. Devino, president, Devino Heat Corp., Waterbury, Conn., "That's why I developed this new promotional stunt to attract more attention to our company." The stunt Mr. Devino refers to is the midget automobile driven by his 10 year old son who invites youngsters 13 years old or younger to take a ride in the "Devino Special."

The "Devino Special" is that in every sense of the term. The body was formed in the company's sheet metal shop and the 3½ hp gasoline engine was built to Mr. Devino's specifications. The body is 90 in. long and 40 in. wide. The seat is adjustable forward and backward within a 12 in. space. The engine is air cooled and has an automatic clutch. The car has three speeds forward and one in reverse. The top forward speed is 30 miles per hour.

The sports car is used to support the public relations work performed by the mobile demonstrator which is part of every public gathering in the Waterbury area. The mobile demonstrator is equipped with dual loud speakers that keep the crowds at ball games, fairs and other social events informed on what is going on. In between the running commentary of the announcer, music is played to vary the tempo of entertainment. When Mr. Devino's son appears on the field he announces over the address system that any child that would like a ride with him around the park can meet him at the "Devino Demonstrator."

There is always a big response to this invitation. The children's parents frequently accompany the youngsters to the meeting place and while awaiting the children's turn to go for a ride in the midget sport car, they have a chance to see and hear about the heating equipment displayed on the truck. There is everything, from a complete furnace with a full size duct system to the gas and oil conversion burners handled.

The name of the company is prominently displayed on both the sport car and the demonstrator truck. Young



MINIATURE CAR ATTRACTS prospects to mobile demonstrator. Children are invited to ride, parents inspect company displays while waiting

Devino, the sport car driver, is dressed in a small size company service man's uniform, a duplicate of those worn by members of his father's service and installation crews.

Mr. Devino says, "If you want the public to know who to turn to when they are thinking of heating or cooling equipment, you've got to keep reminding them where you can be found."

**Tell Others About Your
Successful Ideas**

by writing to:

**Editor, American Artisan
6 N. Michigan Ave.,
Chicago 2, Illinois.**

Completely New and Different!

HONEYWELL'S

V-80

SILENT GAS VALVE

AGA and UL LISTED
Conforms to utility requirements



ACTUAL SIZE



IT'S SILENT
eliminates home owners'
complaints about
noisy valves



IT'S LOW IN COST
priced only
slightly above
solenoid valves



**It eliminates
PERIODIC SERVICE**
because the operating parts
are out of the gas stream

Here's the GAS VALVE that sets a new standard for the industry!



turn to the next page and see the V80's advanced new design!

Revolutionary New Gas Valve Design!

HONEYWELL'S

V-80

SILENT GAS VALVE

Combines the simplicity of the solenoid valve with the silence of the diaphragm valve . . . plus many additional new advantages of its own

Featuring...

the plunger which acts
SILENTLY
in a cushion
of oil

• terminal connections . . . for faster wiring

• electrical parts out of the gas stream . . . meets S. U. R. requirements

• operating parts out of the gas stream . . . eliminates periodic servicing

• can be mounted in any position in a horizontal pipe run . . . solves space problems

• can be used with all gases and all types of equipment



• all working parts permanently lubricated and sealed . . . provides long, trouble-free life

• no bleed connections required . . . cuts installation costs

• small compact size . . . installs out of the way

• self-aligning soft disc valve . . . assures tight close-off

• inclined self-cleaning valve seat . . . eliminates periodic servicing

When you specify the Honeywell **V-80**, you're specifying the best in gas valves!

For complete information, call your
local Honeywell office—or write
Minneapolis-Honeywell, Dept. 2749,
Minneapolis 8, Minnesota.

MINNEAPOLIS
Honeywell

First in Controls

the filter with features worth repeating!

• more profit

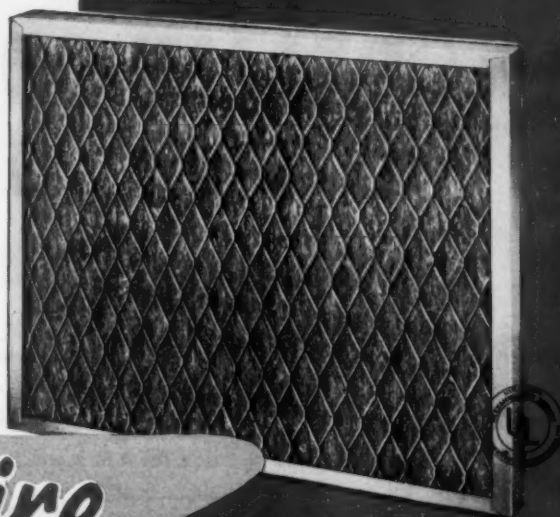
on per-unit sales with a solid demand already established.

• faster turnover

a real volume-builder that sells the growing "change-over" market.

• easier servicing

eliminates nuisance service calls; saves time and material costs.



A-lum-O-Aire

PERMANENT, DRY-TYPE FILTERS

All standard sizes in 1/2", 1" and 2" widths. Special sizes to order.

features that help you sell

Here's the filter that's **BIG NEWS** in the air-conditioning and warm-air heating industry. All-metal "lifetime" construction. Absolutely rustproof and fireproof. Clean, safe, economical. No messy oils or adhesives required.

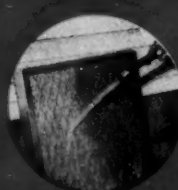
prospects a-plenty!

Everyone in town who owns a warm-air furnace or air-conditioner is your potential customer. One friend tells another — and you make another sale!

washes clean with water

Simplifies routine servicing; reduces time-wasting "callbacks". No mess to clean up — no extra weight to carry. So simple a child could do it!

New sales aids, streamers and displays now ready for your 1955 advertising and promotional needs.



Flushes clean in a jiffy with cold water from hose or faucet. No oils to add. Just wash and replace. Never rusts; no fire or smoke problem. Cleans air safely for better health.

Photomicrograph of aluminum wool media showing contour of tiny berbs which catch and hold even the most minute particles of lint, dust and dirt. Copper media also available for commercial and industrial requirements.



Housewives appreciate savings in dusting and cleaning tasks. No greasy film to settle on walls, windows and furniture. Some even make filter-cleaning a part of regular housecleaning chores.

METAL WOOL DIVISION

CAREY

ELECTRONIC
ENGINEERING CO.
SPRINGFIELD, OHIO

"world's largest manufacturers aluminum and copper wool"

Metal Wool Division
Carey Electronic Engineering Co.
1884 Clifton Avenue
Springfield, Ohio

☐ dealer

☐ distributor

Gentlemen:

I want to know how I can improve my filter merchandising activities. Send me prices and details on A-LUM-O-AIRE.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

Attention Distributors: Exclusive territories in selected areas still available to qualified outlets. Write for complete details, today!



REALLY CONTROL AIR

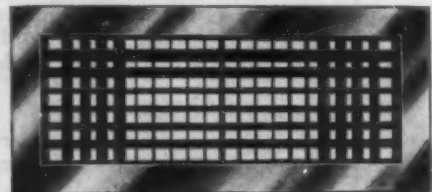
Specify Titus grilles and *know* that you can create the air patterns necessary to meet individual requirements of room and occupant... **ANY SEASON OF THE YEAR.**

Know that you can *pinpoint* the air stream to a specific area...or *diffuse* it...or *deflect* it...or *turn* it...or *reverse* it...or *blanket* a certain part of a room. **ACCOMPLISH THIS WITH QUICK, SIMPLE, EASY, INDIVIDUAL ADJUSTMENTS OF THE LOUVERS** ...without removing grilles from the walls.

..... REMEMBER:

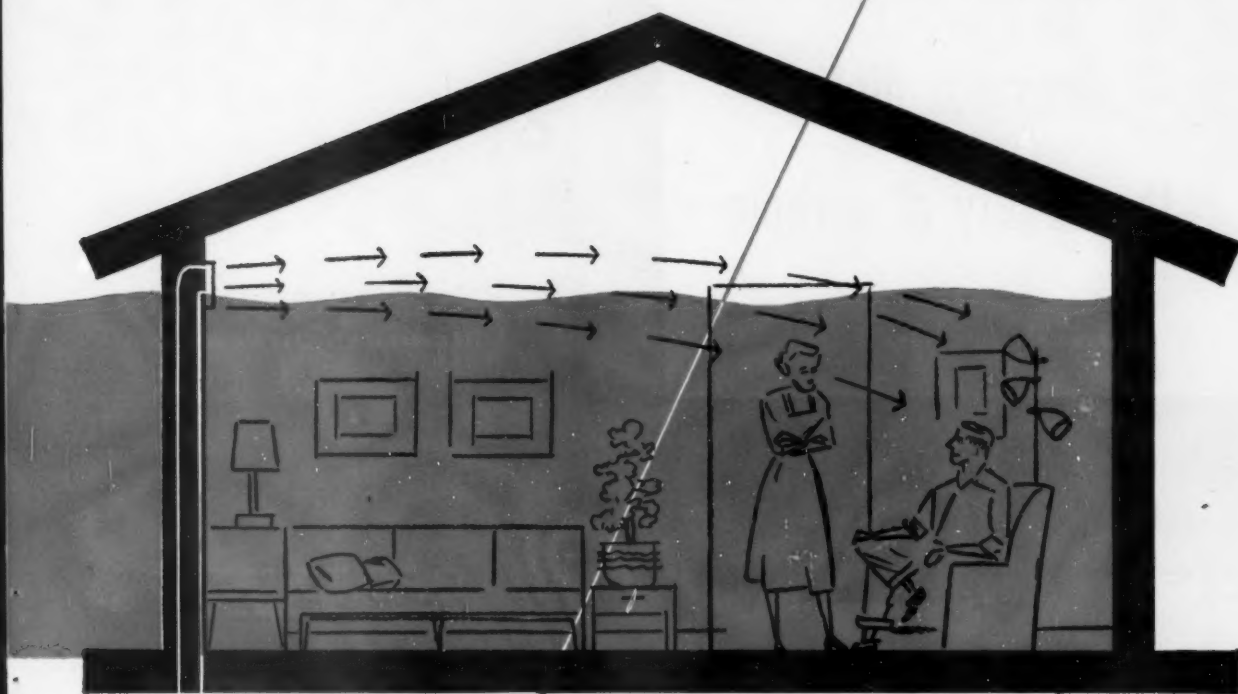
DON'T TAKE ANY SHORT CUTS HERE... THE OUTLET CAN MAKE OR BREAK THE PERFORMANCE OF YOUR ENTIRE HEATING OR COOLING SYSTEM... there are basically only 3 places you can place an outlet... in the wall, ceiling, or baseboard—but there are literally hundreds of different air patterns that may be required from that outlet. That's why Titus grilles with **MORE AIR CONTROL PER SQUARE INCH** assure better performance from any forced air heating or cooling system.

Room comfort is directly proportioned to how forced air is handled in the occupied zone (the region within a room between floor and the 72" level) ... and this is the only area where the entire unit's cooling and heating performance is judged.



TITUS GRILLES

... in the **OCCUPIED ZONE**



eliminate draft problems

FOR MORE Complete information on "HOW TO CONTROL AIR IN THE OCCUPIED ZONE" write for FREE CATALOGS.

TITUS MFG. CORP.
Waterloo, Iowa

Gentlemen: Please rush me complete free information on:

- | | |
|---|--|
| <input type="checkbox"/> Supply Grilles & Registers | <input type="checkbox"/> Return Air Grilles |
| <input type="checkbox"/> Volume Controllers | <input type="checkbox"/> Gymnasium Grilles |
| <input type="checkbox"/> Frames and Accessories | <input type="checkbox"/> Perimeter Diffusers |

Name _____

Company _____

Address _____


City _____ State _____

At last!
a room thermostat that
does not disfigure
the beauty of a room

Lid comes in a brushed stainless finish

the new **DECRO-STAT**
in actual size...


Cam-Stat's answer
to a serious
decorating
problem.



With spring lid open to
adjust temperature setting



Can be wallpapered to match wall



Can be painted to match wall

Now, solid comfort does not require homely gadgets.

Decro-Stat lid size is only 3-9/16" x 2-9/32".

Extends out from wall only 13/16".

Comes with or without thermometer as desired.

Thermometer is visible or under spring lid.

Adjusting dial is visible or under spring lid.

High precision calibration for complete comfort.

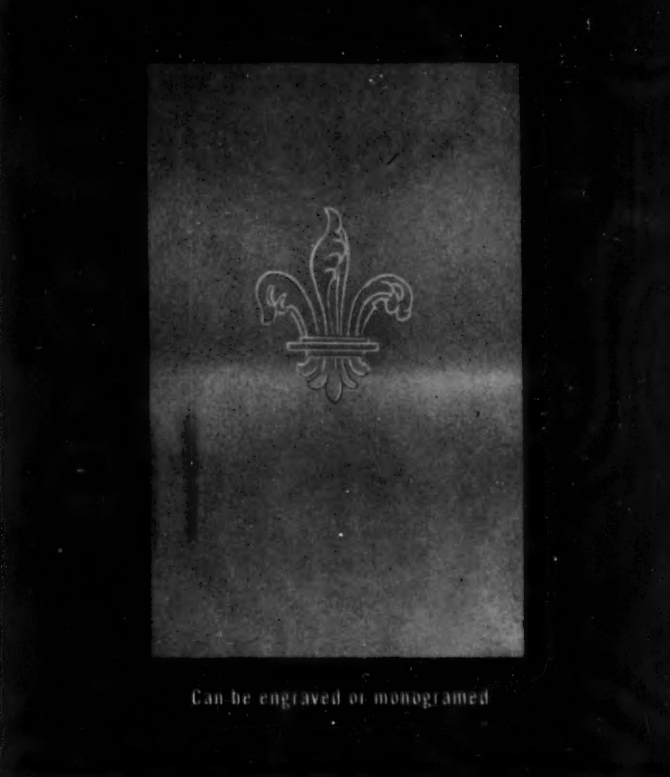
Adjustable heat anticipator for all control systems.

Multiple gold contacts for positive contact.

Adjustable differential.

Low mass bimetal for quick response.

All of these features and SENSIBLY PRICED, too!



Can be engraved or monogrammed



No thermostat can excel Cam-Stat's record of fine service

Gasaver and
Oilsaver Furnaces



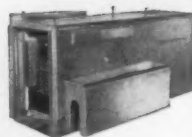
for the industry's most

DeLuxe Gas
& Oil Furnaces



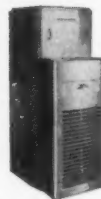
complete line of heating and

Super Gas,
Oil & Coal Furnaces



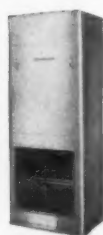
cooling equipment backed by

Special Gas
& Oil Furnaces



strong consumer promotion . . .

Wethermatic
Airefrigeration
Waterless Cooling Units



choose

WILLIAMSON

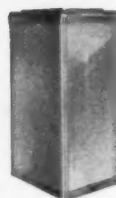


Blue-Gray Metalescent Finish

New Designs
New Models
New Colors



Two-tone Hammer Finish Green



Gleaming White Enamel



As Advertised in Leading Magazines

THE WILLIAMSON COMPANY

3310 A-1 Madison Rd.

Cincinnati 9, Ohio

Gentlemen:

Please send me information on the following:

- ☐ Heating Equipment ☐ Cooling Equipment
☐ Duct, Pipe and Fittings

Name.....Title.....

Firm.....

Address.....

City.....Zone.....State.....

RX DR. HANDY
PEORIA, ILL.
*Scientific Design
Top Materials
Expert Workman-
ship.
Dr. Handy*

*The 90 Year Old Prescription
that still enables*

HANDY PIPE

to outlast the buildings it goes into

Through the years we have kept our products geared to the latest trends of the trade and in tune with the day's demands.

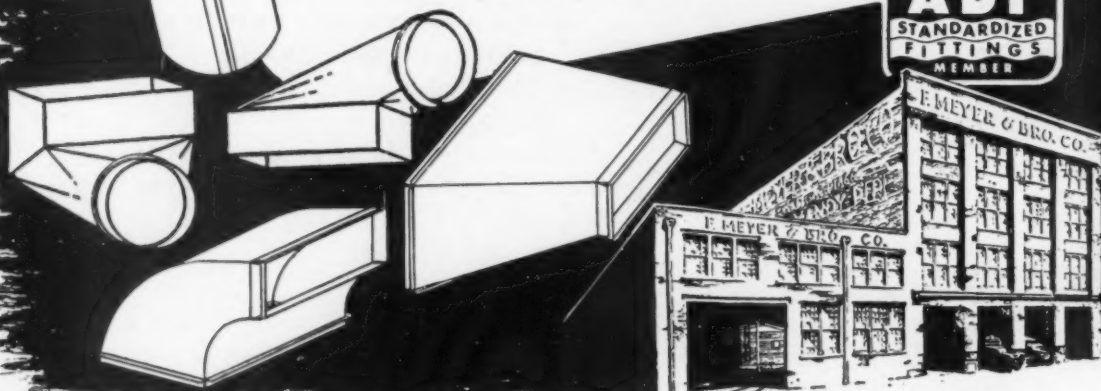
Our standardized fittings blend with the latest developments to provide every item your installation needs require . . . and Handy Pipe **QUALITY** goes into every piece.

*We
Sell
Miles
of this
Longfellow*

F. MEYER & BRO. CO.

Established in 1866

PEORIA 2, ILLINOIS



NOW profit comes in **colors**

DUSTY PINK FRENCH GRAY FIRNMIST COLONY BLUE SANDALWOOD POTTERY BLUE

as shown in illustration

a completely **NEW**
sales appeal in

Curtis

**AIR CONDITIONING
UNITS**

It's a Curtis exclusive!

For the first time Curtis packaged
air conditioning units in a rainbow of
cool restful colors baked on at the factory.

Dealers everywhere will welcome
this sales plus because:

1. The modern trend is to colors in
appliances of all kinds. Now you have it in
Curtis packaged air-conditioning.
2. Combinations of colors are available
to complement any decorative pattern your
customer may desire!
3. A whole new field is opened to you with these
new colorful Curtis units that cool and add beauty
to any interior.

and ONLY Curtis has it!

Remember,
you can
count
on

Curtis

**MANUFACTURING COMPANY
Refrigeration Division**

1950 KIENLEN AVE. • ST. LOUIS 20, MO.

CURTIS PACKAGED AIR CONDITIONING UNITS—SPECIFICATIONS

CABINET

Constructed of heavy gauge steel with an attractive baked finish that can be furnished in various color combinations as selected by customer.

HUMIDITY CONTROL

All units are furnished with a by-pass damper.

INSULATION

The interior is entirely insulated with approved type of heavy insulating and sound-absorbing material. This prevents exterior sweating and insures quietness.

COMPRESSOR—COMPRESSOR MOTOR

Hermetic and semi-hermetic type for F-22.

CONDENSER—RECEIVER

Shell and coil type with Lo-Fin copper tubes. Extra large capacity, low pressure drop, for either city water or cooling tower. A.S.M.E. condenser (with liquid level gauge assembly connections) standard. A fusible safety union standard on all models.

MAGNETIC MOTOR STARTER

Across-the-line magnetic motor starter provided with thermal overload protection.

FILTERS

Standard throw-a-way type.

COOLING COIL

Properly sized, balanced with the condensing unit. Copper tube and aluminum fin construction, mechanically and thermally bonded for highest heat transfer. Tubes are staggered and headered for maximum efficiency.

CONTROL

An automatic thermostat and a three position selector switch is built into the unit and is adjustable from the exterior of the cabinet. The fan may be operated separately for ventilation when cooling is not required. High pressure cutout-control is regular equipment. (Cutout pressure for F-22 is 350 PSI.) Note: On Model Series 15 & 20, selector switch controls No. 1 compressor; thermostat controls No. 2 compressor.

SEE YOUR CURTIS REPRESENTATIVE

OR
WRITE

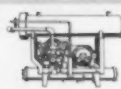
Curtis



Condensing Units
Up to 100 Tons



Cooling Towers
Up to 100 Tons



Packaged Liquid Chillers
Up to 100 Tons



Multi-Zone Air Handling Units
Up to 75 Tons



Condensing Units Air Cooled
Commercial - Residential

OPTIONAL EQUIPMENT

The following is available when specified.

PLENUM AND GRILLE ASSEMBLY

When duct work is not necessary the plenum and grille assembly is available as an extra. The discharge grille is adjustable in two directions.

WATER REGULATING VALVE

For use with city water supply. Valve is not attached.

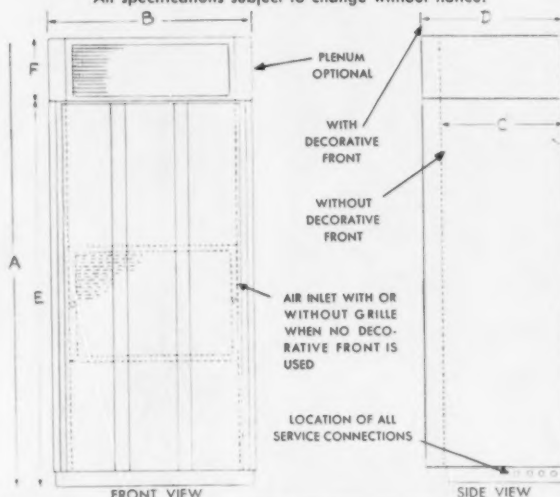
HEATING COIL

When specified, one or two row heating coil, hot water, steam, or steam distributing tube type can be provided for field installation.

COOLING COIL

For special applications, additional rows can be furnished, when heating coil is not used.

All specifications subject to change without notice.




MODEL	COMPRESSORS	CFM	NO. OF BLOWERS	DIMENSIONS					
				A	B	C	D	E	F
CA400	1-3HP	1200	1	84 1/2"	25"	22"	25 1/2"	72 1/4"	11 3/4"
CA600	1-5HP	2000	1	84 1/2"	38"	24"	27 1/2"	72 1/4"	11 3/4"
CA800	1-7 1/2HP	3000	2	93 3/4"	42"	24"	27 1/2"	80"	13 3/4"
CA1200	1-10HP	4000	2	98 3/4"	54"	24"	27 1/2"	85"	13 3/4"
CA1600	2-7 1/2HP	6000	3	98 3/4"	78"	25"	28 1/2"	85"	13 3/4"
CA2200	2-10HP	8000	3	107 1/4"	78"	30"	33 1/2"	92"	15 1/4"

Standard air discharge is vertical-up on all units; only on model CA2200 top horizontal air discharge (front or rear) optional with standard parts.

102 YEARS
OF MANUFACTURING
EXPERIENCE

MANUFACTURING CO.
Refrigeration Division
1950 Kienlen Ave. • St. Louis 20, Mo.

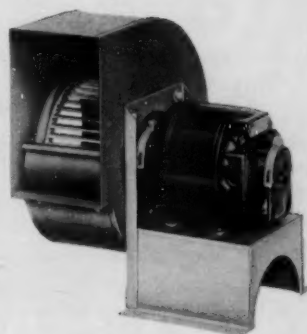


**WITH UTILITY
STANDARD
DUTY BLOWERS**

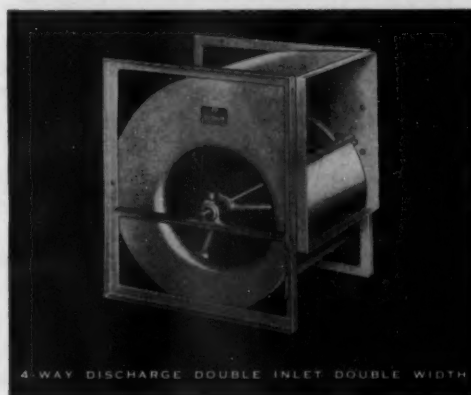


SERIES ELEVEN

Dealer-contractors look to Utility to meet the highest specifications and beat the lowest bid.



VENT SET



Let us send you full information on Utility blowers. Write

UTILITY FAN CORPORATION

A Division of Utility Appliance Corporation

911 East 59th Street, Los Angeles 1, California

MANUFACTURERS OF HEAVY AND STANDARD DUTY BLOWERS
FOR HEATING, AIR CONDITIONING AND VENTILATING
INSTALLATIONS. PRODUCERS OF BLOWERS AND BLOWER
PARTS FOR ORIGINAL EQUIPMENT MANUFACTURERS.



WHAT THE ASSOCIATIONS ARE DOING



MEMBERS OF THE INDIANA convention committee met recently to discuss program plans for the group's coming 38th annual convention

Indiana Program Plans Near Completion

PLANS FOR THE 38TH ANNUAL convention of the Sheet Metal and Warm Air Heating Contractors' Association of Indiana are rapidly approaching completion, according to Chris Sorensen, chairman of the convention committee. Professor W. T. Miller of Purdue University is scheduled to give a "Review and Preview of Heating and Air Conditioning" and K. E. Glancy, also of Purdue, will outline the 1956 warm air heating short course. William E. Garber, Jr., the association's representative in the Indiana Building Congress, will discuss the new Indiana gross income tax law and will explain the approved method of reporting the new taxes and the procedure for filing for refund on taxes already paid.

C. W. Nessell, chairman of the field investigation committee of the National Warm Air Heating and Air Conditioning Association, will report on unsatisfactory heating jobs which occur when equipment is not installed under the supervision of a qualified heating engineer. A contractor business panel, moderated by Mr. Garber, will bring out today's problems in operating a business. Overhead costs, salesmen commissions, warranty service, estimating, billing and collections are some of the subjects scheduled for discussion. J. W. Ridgway will moderate a technical information panel consisting of six members of the air conditioning and gas and oil heating fields who will discuss installation and service problems.

Kalamazoo Group Elects Officers

OFFICERS FOR 1956 elected at a recent meeting of the Kalamazoo Sheet Metal, Roofing, Heating & Air Conditioning Contractors Association are: president, John DeHaan; vice president, Harold Guernsey; treasurer, Richard A. Nipe; and secretary, E. J. French.

Roy C. Hauck, production and products manager of Ingersoll Conditioned Air Div., Borg-Warner Corp., was

the speaker at the group's December meeting. Mr. Hauck discussed the subject of Air Distribution for Winter Heating and Summer Cooling and explained a short method of figuring heat loss and heat gain.

Plan Chicago Comfort Conference

THE 10 MEMBER comfort conference committee for the Chicago area, with George Kalvog, Austin Sheet Metal Works, as chairman, has completed the final plans for the two day program scheduled for the Graemere hotel, January 23-24. The leader of the conference will be Guy Voorhees, technical applications secretary for the National Warm Air Heating and Air Conditioning Association.

The Chicago committee, consisting of dealers, wholesalers, manufacturers' representatives and the trade press, have put together a promotion program that should assure a capacity registration of dealers and their employees equalling the total of 231 who attended the previous Chicago comfort conference held in 1954. The educational program is being publicized for its extensive coverage of central residential cooling techniques.

The publicity program includes three mailings to dealers within a 150 mile radius to the west and south and 80 miles to the east and north. The mailings, made at 15 day intervals, are supported by efforts of wholesalers, wholesalers' salesmen and manufacturers' representatives, all of whom have recommended to their customers that they attend the conference. Dealer associations have joined the committee's promotion program and are urging members to take advantage of the training offered.

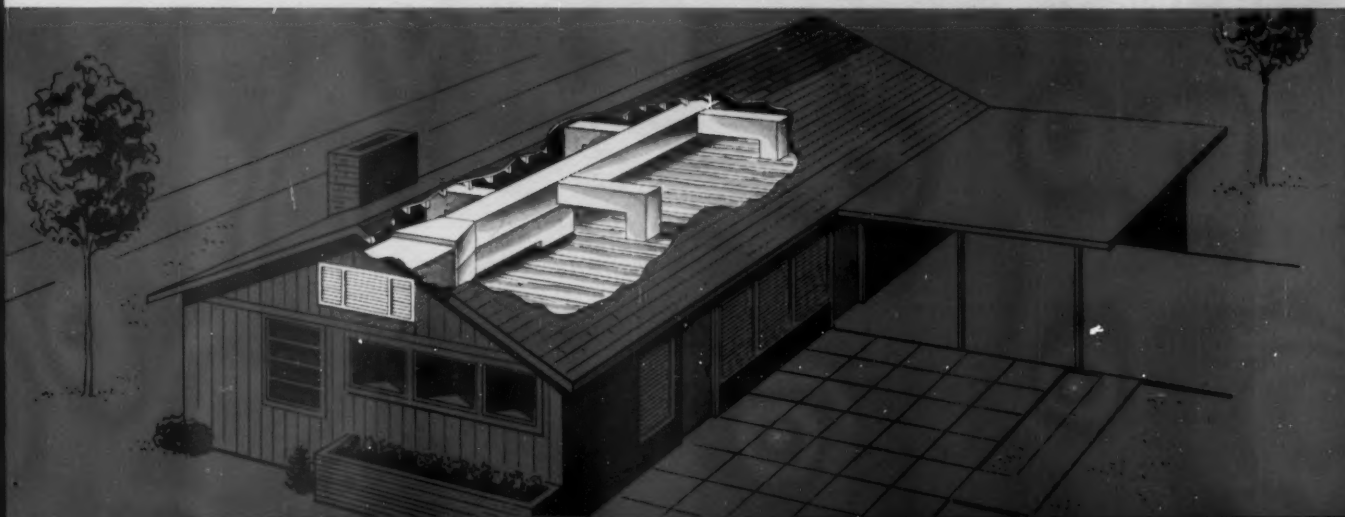
There have been over 2000 letters sent out in each of the mailings made by the committee and in addition envelope stuffers have been used by wholesalers in their usual correspondence with dealers.

(More association news on page 56)

Vornado[®]

REVOLUTIONARY PACKAGED HOME AIR CONDITIONER

...just cools **BETTER**



The most Sensational Advance in Central Cooling

● HIGH PERFORMANCE

Twin systems with commercial compressors produce maximum cooling and constant humidity control.

● LOWER COST

Self-contained, air-cooled unit, and exclusive new prefabricated duct drastically lowers unit and installation costs.

● FAST INSTALLATION

Can be easily added to heating duct work, or a complete ready-to-assemble duct kit of Fiberglas is provided where needed.

● FULLY GUARANTEED

Factory warranty (backed by the experience of building over 7 million Vornado cooling appliances) assures satisfactory service.

● FHA

Designed and manufactured for use in FHA mortgage-insured properties.

Only Vornado has been successful in building a low-cost central air conditioner that is practical and can be easily installed in existing homes. New engineering principles...plus many years of manufacturing "know how"...have been combined to develop this amazing air conditioner for the add-on business in existing construction.

Here, for the first time, is a central air conditioning unit you can easily install...sell at a low price...and confidently know it will give years of carefree, trouble-free air conditioning in your customers' homes.

Look at These Amazing Facts!

Products of

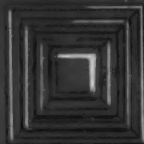
THE O. A. SUTTON CORPORATION, Wichita, Kansas

Specialists in the manufacture of comfort cooling appliances.

Vornado's GREAT NEW

Pre-Engineered - Pre-Packaged - Ready for the Job

LOOK AT THESE AMAZING VORNADO UNIT FEATURES



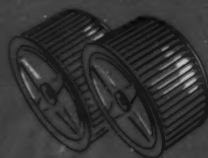
EXCLUSIVE DIFFUSERS

Can be located any place in the cooling area without affecting cooling efficiency. Unique fin arrangement allows direction of air any place desired.



TWIN COMPRESSORS

Two hermetically sealed, heavy duty compressor units. One compressor operates continuously... maintains a cold evaporator at all times... constantly removes humidity from the air. For economy of operation, second compressor "cycles" on and off as needed.



TWO HIGH CAPACITY EVAPORATOR BLOWERS

Each with twin air inlets... balanced to the large coil area of the evaporator for quiet movement of a large volume of cool air.



COMPLETELY AIR COOLED UNIT

Requires no water connections... completely eliminates expense of water system and maintenance.

NO TROUBLESOME VALVES

Hermetically sealed unit eliminates costly "on the job" adjustments... seasonal maintenance calls.

NO EXPENSIVE OLD FASHIONED PLUMBING

Eliminates complicated water controls, pumps, towers... Stops water system maintenance expense.

ELECTRICAL CONTROL BOX

Is pre-wired for quick connection of manual 3-position switch or for automatic cooling with a thermostat.

CONDENSER FAN AND SLINGER RING ASSEMBLY

Pulls huge volumes of fresh outside air over condenser. One piece fan blade is perfectly balanced and tracked for vibrationless operation.

TWIN RUN CAPACITOR

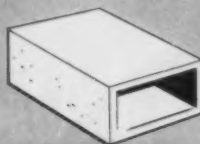
Reduces amperage draw... makes possible the "cycling" on and off of the second compressor for Vornado Twin System cooling.

VORNADO Prefabricated DUCT EASILY INSTALLED



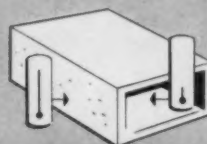
IT'S FEATHER QUIET

Ductwork... especially balanced to the unit... completely eliminates any air "whistle". Millions of intertwining glass fibers form microscopic air pockets to absorb noises.



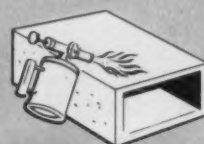
IT'S AIR TIGHT

Vornaduct is a full three-quarters of an inch thick, presenting a barrier to entry of hot, outside air keeping inside air cool longer.



IT WILL NOT SWEAT

Reinforced aluminum foil vapor barrier around the outside prevents "sweating" (condensation of air-borne moisture) which can ruin ceilings and walls.



IT'S FLAME RESISTANT

The hard finish, flame resistant coating of all Fiberglas ducting gives you vital protection while assuring the efficiency of maximum air velocity.

● COMPLETELY SELF CONTAINED

Vornado puts residential air conditioning in a "package"... eliminates any extra plumbing... piping... water connections... or outside accessories. Everything is housed in the one small... compact... sturdy package.

● PRE-FABRICATED DUCTWORK

Vornado engineers successfully developed this low cost, prefabricated, insulated ductwork that drastically reduces your installation costs. Assembled by merely taping pre-scored sheets together... it is one of the most amazing new developments in the air conditioning field.

● SIMPLIFIED CONTROLS

One simple switch... plus a thermostat if desired... completely controls Vornado's powerful cooling operation. Can be set on "Hi" for extra hot days... or reduced to "Lo" for mild days and more economical operation. During winter months just turn unit "Off"... no start-up or pump-down problems.

● LOW PRICE TAG

Vornado is the first truly low-cost... high-quality air conditioner any dealer can sell with confidence. You'll be amazed at the very few dollars Vornado adds to your construction costs.

Dramatic Sales Promotion Aids

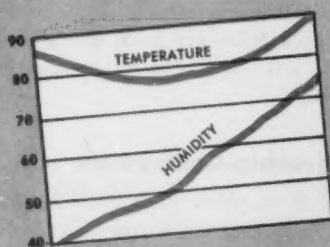
Vornado helps you sell central air conditioning with dramatic... well-planned... merchandising and sales aids that bring in "leads". Market place display, consumer sales aid, handout pieces, publicity stories, ad layouts, follow-up house parties... and many other promotional programs... all designed to get you more sales... and capture this huge market in your area.

CENTRAL AIR CONDITIONERS

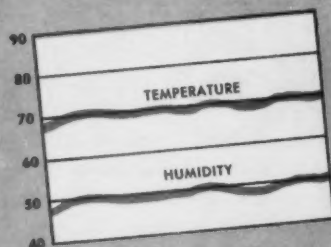
- Low Cost - Easily Installed - High Performance!

Here's Proof of Vornado's Tremendous BALANCED COOLING CAPACITY

Here are the results of tests conducted in St. Louis by Dr. E. M. Brooks, Professor of Geophysics and Geophysical Engineering. They prove without a doubt that Vornado does an effective job of cooling regardless of outside conditions. Notice how inside temperatures remained at an even 70 degrees and how humidity never exceeded 50%. These tests were conducted under normal living conditions . . . families with children . . . doors being opened and closed.



Outside temperatures reached as high as 90 degrees with humidity reaching the 80% point during test period.

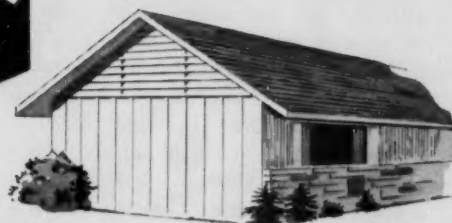


Here's the chart showing Vornado's performance while outside conditions shown above existed. Notice how the temperature remained at an even 70 degrees and humidity never exceeded 50%. Children were running in and out during this extensive test too.

YES! Vornado Just Cools Better!



Houses of flat-roof design require only inclusion of an inconspicuous dormer to accommodate the unit.



This simple, gable installation allows installation with a minimum amount of effort. Prefabricated grille is available that can be painted with the house. Architectural treatments are limited only by the imagination of the dealer.



Many dealers have successfully tied the unit into existing furnace ductwork by installation through the basement wall. This particular type installation offers reduced cost in duct runs.

**TWO SIZES TO FIT AVERAGE
2- 3- or 4-BEDROOM HOMES**

Products of
THE O. A. SUTTON CORPORATION
WICHITA, KANSAS

Specialists in the manufacture of comfort cooling appliances

**SEND
THIS
COUPON
TODAY**

THE O. A. SUTTON CORPORATION

1807 West Second Street

Wichita, Kansas

I want complete information on your new low-cost central air conditioners. It is understood there is no obligation.

NAME

FIRM

POSITION

ADDRESS

CITY STATE

Detroit Protests Ordinance Amendment

A RECENT PROPOSAL that the Detroit heating ordinance be amended to allow the issuing of permits to home owners to install gas and oil fired heating equipment has met with vigorous opposition from the Detroit Warm Air Heating Association. In a letter to the Detroit Building Commissioner, N. J. Biddle, secretary of the association, calls attention to some of the faults of the proposed amendment.

One provision is that the home owner be familiar with the ordinance requirements. "Familiarity is not enough," Mr. Biddle states in his letter. "We will grant that a mechanic of reasonable intelligence could study the ordinance for a period of time and perhaps become fairly familiar with certain portions of it, but that does not necessarily make him familiar with the equipment which he proposes to install. Since the ordinance covers only oil or gas fired equipment, the equipment will be automatic in operation, thereby bringing further complication into the picture. The installation of automatic oil or gas fired equipment is not a simple matter."

Another provision is that the home owner be capable of performing the work in conformity with the ordinance requirements. "Most Americans," Mr. Biddle points out, "seem to believe that they are able and qualified to do almost anything from fixing a faucet to repairing an automobile or installing a heating unit. It is an admirable trait but must be restrained somewhat in the public interest. If the home owner wants to do it himself, we believe he should first prove beyond a reasonable doubt that he really is familiar with the ordinance, familiar with the installation and operation of heating equipment, and capable of its proper installation."

The dangers inherent in a faulty installation are also described. "There can be serious explosions," the letter explains, "which constitute a threat not only to the home owner himself but to his immediate neighbors as well. We believe the proposed amendment to the heating ordinance stretches the right of the individual out of all proportion. We see no undue abridgment of the constitutional rights of an individual when he is prohibited from engaging in certain hazardous activities without first reasonably proving that he is fully aware of the dangers involved and trained in the necessary precautionary measures required to assure reasonable safety."

Alabama Holds First Convention

MEMBERS OF THE ROOFING and Sheet Metal Contractors Association of Alabama were well pleased with both the business and social programs planned for the group's first annual convention by a committee under the chairmanship of Jack Halfacre. A state board of directors for the association was elected, headed by Emory Cunning-

ham of Headland, Ala. The following were elected to board membership: John Spaulding, Gordon Kerr, Herbert Lane, Robbins Taylor, Reedis Brooks, Fred Ballard, Landis Williams, Charlie Hawkins, Jim Pearson, Owen Leach, J. H. Smith, J. F. Ratliff, Gordon Maples, Bill Karan, and Frank Morgan.

Georgia Group Holds Winter Meeting

THE ROOFING AND SHEET METAL Contractors Association of Georgia held its winter conference at the Henry Grady hotel, Atlanta, on December 3. Speakers included Glover McGhee of the law firm of Currie and McGhee, who discussed recent developments in workmen's compensation laws in Georgia, and T. V. Williams, commissioner, State Department of Revenue, whose talk dealt with operations of the State Revenue Department. Subject for a panel discussion was How to Lower Your Unemployment State Insurance Tax Rate. Ben T. Huiet, commissioner, Department of Labor of Georgia, served as moderator.

Social activities included a "Dutch Treat" outing at Aunt Fanny's Cabin, a fellowship hour, and a luncheon for the ladies which was followed by a tour of several of Atlanta's finest shops.

Hold Apprenticeship Conference

SEVERAL MEMBERS of the Ohio Sheet Metal Contractors Association were in attendance at the recent Annual Ohio Apprenticeship Conference held at the Deshler-Hilton hotel, Columbus. Speakers included representatives of management, labor and education as well as state and federal apprenticeship agencies, who discussed various plans for promoting better ways of training apprentices to take care of the diminishing supply of skilled workers. Featured was a sheet metal training session, where speakers covered such points as understanding the training program, selecting better apprentices, the need for comprehensive records, and improving the training.

Fines for Stayaway Members

TO DISCOURAGE ABSENTEEISM, the Master Sheet Metal, Furnace and Roofers Association (Rochester, N. Y.) has included a bylaw in its constitution which provides that fines may be imposed on members who fail to attend at least five meetings a year. Speaking on the subject of absenteeism, secretary Richard W. Friday says that those members who use the excuse of "the pressure of business" for failing to attend should come out to a few meetings — "if only to find out how the other fellow finds time to attend."

(More association news on page 59)

*There's built-in
durability in*
WEIRKOTE

for all sheet-metal work

Wherever a durable zinc-coated material is needed for sheet metal fabrication, there's nothing better than Weirkote. Gutters, downspouts, ducts—no matter what the application, the name Weirkote on galvanized steel means uniformly high quality steel, tightly coated with zinc to resist cracking, peeling, flaking and corrosion. The high quality is assured by Weirton's modern mills and methods—and men.

When your specifications call for galvanized steel, call Weirton, and be sure.

Weirkote is available in coils and cut lengths: gauges 16 to 30 inclusive. Maximum width—42", maximum cut length—168". Weirkote can be obtained to fit any customer requirement. For standard roofing and siding it is guaranteed to conform to A.S.T.M. specification A361-52T.

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*throughout the house,
throughout the year,
solid comfort from here...*



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install Standard's
new **B-24**
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baseboard diffuser!

The B-24 maintains heating and cooling comfort at a new high level, because it spreads air evenly over outer walls, keeping floors warm, windows free of condensation, and rooms uniformly comfortable from floor to ceiling. It replaces lost heat immediately, where it's lost, and provides constant, gentle air circulation.

Adjustomatic Control! makes damper so easy to adjust a child can do it!

Easier to install in new or old construction! has built in damper; boot opening adjustable to max. of 12 1/4" x 14"; comes in 2 ft. sections, 4 1/2" high!

Beautiful decorator design! modern lines, tan metallic baked-on enamel finish!

Act now! Mail the coupon today for
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Gentlemen: Please send literature and discount sheets
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New York Completes Convention Plans

THE NEW YORK State Sheet Metal, Roofing & Air Conditioning Contractors' Association plans to hold its 33rd annual convention at the Utica hotel, Utica, February 5 to 8. A number of outstanding speakers are scheduled to address the various sessions, including Victor G. Pignolet, manager of sales for the Roof Deck Div., Inland Steel Products Co., whose talk is entitled What About This Business of Steel Roof Deck?; J. C. Scheel, chief heating inspector for the city of Cleveland, who will discuss heating codes and licenses; and Ray F. Horan, merchandising manager, General Controls Co., whose subject is School of Sales and Dealer Management.

Immediately following luncheon on Tuesday, conventioners will be taken by bus to the Revere Copper and Brass Mills and will be escorted through the plant by officials of Revere Copper and Brass Co.

D. L. Hayes will present a report on state compensation group No. 194, and safety committee reports will be given by William C. Schmitt, Jr., chairman, and John C. Kirkpatrick, co-chairman of the safety committee.

The annual meeting of the state association (for members only) will be held on Wednesday, February 8, when reports will be heard from the auditing, resolutions and labor relations committees.

The Merchandisers will hold their annual meeting on February 6. Reports will be given by the secretary and treasurer as well as the auditing and nominating committees, following which installation of new officers will take place.

Hold Contest for Best Seal Design

RAY BAKER, sales engineer for American Heating Co., Long Beach, Calif., submitted the winning design for a proposed new seal for the Institute of Heating and Air Conditioning Industries. Mr. Baker's design shows a triangle in which is a circle encasing a picture map of the world. Across the face of the map is a banner reading "Year around comfort," and in the three corners of the triangle are the words "heating, ventilating and air conditioning." The association's name appears inside the circle surrounding the map of the world.

Ohio Prepares Convention Program

THE OHIO SHEET METAL Contractors Association reports that plans are developing rapidly for its 42nd annual convention scheduled to be held February 20-22 at the Biltmore hotel, Dayton. According to president Vance Heyman the convention format will be considerably different than that used in the past, with more emphasis being placed on individual problems and their solutions. Robert Butler, convention chairman, has decided to use the forum system as much as possible this year. This will en-

able each person to attend the sessions in which he is specifically interested. An innovation will be the reserving of a special floor of the hotel for jobbers and manufacturers. Other plans include a special welcome by the hospitality committee, morning sessions starting at 10:00, hospitality rooms, etc.

Indoor Comfort School for Birmingham

THE NATIONAL WARM AIR Heating and Air Conditioning Association will hold a two day indoor comfort conference at the Redmont hotel, Birmingham, February 6 and 7. Guy Voorhees will conduct the meeting, which will be devoted primarily to summer cooling. Mr. Voorhees will also give a review of perimeter heating.

The meeting is under the sponsorship of local wholesalers — Arnold-Brown Metals & Supply Co., W. M. Dunbar Co., Hinkle Supply Co., Shook & Fletcher Supply Co., and the Geo. F. Wheelock Co. — all of whom are working together to promote attendance and make the meeting an outstanding success.

ASHAE to Meet in Cincinnati

THE AMERICAN SOCIETY of Heating and Air-Conditioning Engineers will hold its 62nd annual meeting at the Sheraton-Gibson hotel, Cincinnati, January 23-25. During the three day meeting, 16 papers will be presented, including several from the ASHAE research laboratory and cooperating universities. Symposium discussions by authoritative panels on high velocity air distribution and air pollution will take place Wednesday afternoon.

Among the papers to be presented and of interest to ventilating contractors are Elements of Dual-Duct Design and Performance, by N. S. Shataloff, and Branch Fitting Performance at High Velocity, by C. M. Ashley. Programs for the two symposiums are as follows:

High Velocity Air Distribution Symposium

Duct Design — M. W. Wilson
Economics, Costs vs Velocity — John Everetts, Jr.
Fan and Air Noises — C. W. Lemmerman
Duct Construction — K. A. J. Monier
Field Testing — R. D. Tutt

Air Pollution Symposium

Health Aspects — Arthur Stern
Smog — Gordon Larsen
Regulations — Harry Ballman
Cleaning — J. W. May
Practical Approach — Charles Gruber
Enforcement — J. H. Carter

The meeting will be concluded with the annual banquet on Wednesday evening, at which time the newly elected officers will be installed. Robert W. Keeton, M. D., will

(Continued on page 64)

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**Saves time, work and money;
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Penn combination fan and limit controls are designed for low, line or millivoltage service . . . *at no extra cost.* Penn's superiority is recognized by customers, too. They know Penn controls mean healthful comfort. They know the Penn name means accurate and dependable operation. It's the kind of dependability that eliminates, for you, those costly service call-backs.

On your next heating job, specify Penn controls . . . *they cost no more!* Penn furnace controls are also available in single units . . . for fan only, or limit only. Be sure to ask your burner manufacturer or wholesaler for Penn heating controls. **Penn Controls, Inc., Goshen, Indiana.**

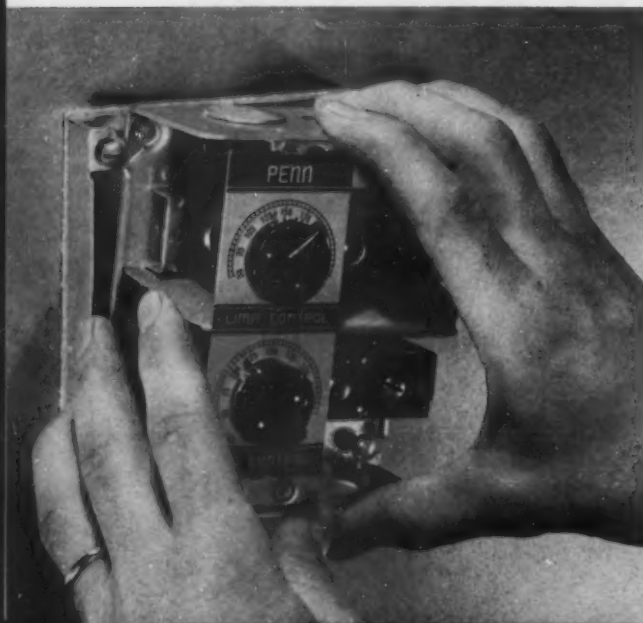
PENN AUTOMATIC CONTROLS

For Heating, Refrigeration, Air Conditioning, Gas Appliances, Pumps, Air Compressors, Engines

1. Cut $1\frac{1}{4}$ " power element hole. Drill 2 mounting holes, using asbestos seal as template. Start mounting screws through bracket.

2. Insert power elements through the hole and hook slots in control case under screw heads, then tighten screws.

3. Make electrical connections, place control cover in position and secure 2 retaining screws. That's all you do . . . it's simple and fast.



We aim to make your sales
turn **greener** every day



you're the hero with
Mueller Climatrol

This year, we're out to help you get bigger-than-ever profits with the long green line of heating and cooling equipment.

Throughout 1956, we'll be singing your praises in a powerful, sales-inspiring advertising campaign. Thousands of present and prospective home-owners in your area will read and respond to the pre-selling drive of advertisements like the one shown here in reduced form. They'll see these ads in mag-

"Iced in"
by heating problems?



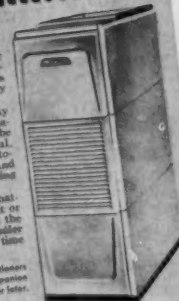
see the man from
Mueller Climatrol

Bothered by frightful fuel bills? Fartness? Battered heat? Then remember — there's someone next you who's an expert on home heating... your Mueller Climatrol dealer! He heads an organization of trained specialists... commands the world's most complete line of quality heating and cooling equipment.

Plan now to replace your present balky heating unit with famous Mueller Climatrol winter air conditioning. You'll be amazed by the change... wonderful, healthful warmth in every room... automatic dependability with gas or oil. And summer comfort, too — just by adding summer cooling.

MAKE YOURSELF COMFORTABLE! What your needs — replacement unit or complete system — be sure you get the best. Call your Mueller Climatrol dealer... ask him about his convenient time payment plan. Do it today!

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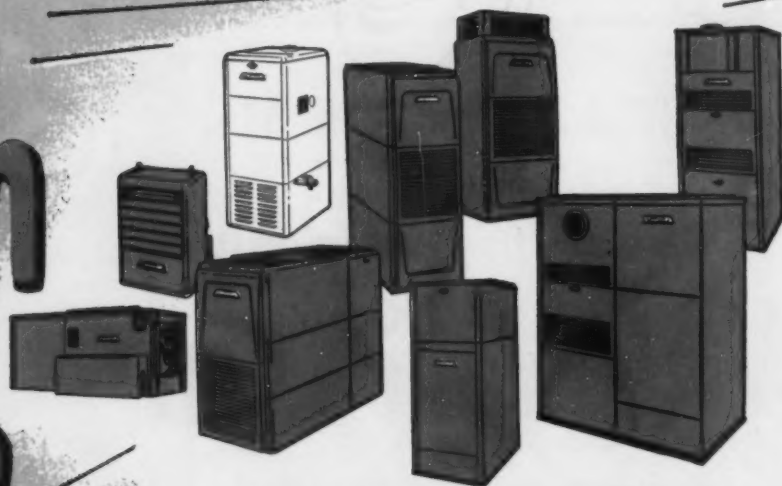
**More reasons why
it pays to sell...
Mueller Climatrol**



Pre-tested Selling Aids

No other manufacturer of heating and cooling equipment gives you all this sales promotion material . . . proved effective under actual market conditions. You get a full line of product bulletins . . . direct mail . . . local newspaper ads . . . outdoor posters and highway signs . . . streamers and store displays . . . TV and theater films . . . radio commercials . . . and more, much more!

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long
green
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America's Most Complete Line

No other manufacturer of heating and cooling equipment offers you more variety to sell — variety that covers the broadest range of sizes and prices. You get a complete selection of winter air conditioners. You get summer air conditioning—air or water cooled—from coils to packaged units . . . from combinations and add-ons to companion units. You get gas and oil-fired unit heaters . . . boilers . . . incinerators . . . a host of famous-quality products, all with pace-setting engineering.

WINTER
BEGINNING NOW...we set the scene for the selling month! All promotion designed to sell you as the expert best qualified to solve any heating or cooling problem.

SPRING
BEGINNING IN MARCH...we make the bid for profitable, new-construction business. Our pre-selling package is geared to build public acceptance for the man who handles the Mueller Climatrol line.

SUMMER
BEGINNING IN JUNE...Year-round comfort is the theme. Integrated promotion helps sell Mueller Climatrol home cooling equipment...punches up home heating, too.

FALL
BEGINNING IN SEPTEMBER...everything you need to help you get your share of replacement business. Everything you need to help build sales of oil and gas conversions, too.

Coordinated 4-Season Promotion Plan

Four times during 1956, Mueller Climatrol dealers will receive a sales promotion kit — packed with everything you need to tie-in with the national pre-selling program.

You can profit more with Mueller Climatrol

To give you all the exciting facts about the money-making possibilities would take all the pages of this magazine.

For example, we could tell you about our prospect-pleasing time payment plan and our sales anticipation program for you. We could

tell you about our tie-in with Operation Home Improvement, the big national campaign that will win dollars for you on replacement business.

We could go on forever... but we won't! We want you to get the story first-hand from the man who knows it best.

Call your man from Mueller Climatrol ... or mail this coupon!



Now's the time to get the facts on why this is the year to profit with America's most complete heating and cooling line. Call today... learn why sales are turning greener every day.

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2630 W. Oklahoma Avenue
Milwaukee 15, Wisconsin

I'd like to know more about the profit possibilities offered by Mueller Climatrol.

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Address

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WITH THE ASSOCIATIONS

[Continued from page 59]

be presented with the society's highest award — the F. Paul Anderson medal — by president John E. Haines. Since 1935 when the society began cooperative research at the University of Illinois College of Medicine on man's physiological adjustment to environment, Dr. Keeton has been active in the program. The work directed by him has resulted in some 30 papers of which 13 have been presented at ASHAE meetings. These papers and reports are valuable contributions to the available information on the subject of man's reactions to the effects of his air environment.

Plumbers Ask Enlarged Jurisdiction

A RECENT PROPOSAL by J. D. Mack, executive secretary of the California Plumbing Contractors Association that the plumbing license should be enlarged to include "the installation of floor and wall furnaces, space heaters and other unit-type furnaces and heaters not requiring ducts or piping except for vents and fuel supply" has met with lively opposition on the part of sheet metal and heating contractors throughout the state. The proposal was made at a recent hearing before the State Contractors' License Board in Sacramento. The Institute of Heating and Air Conditioning Industries as well as the Sheet Metal Contractors' Association of San Francisco and the Sheet Metal Contractors Association of Southern California presented arguments as to why the plumbing license should remain as is, and not include a portion of the work of the heating contractor. The Refrigeration and Air Conditioning Contractors Association of Southern California, Inc., also has taken a stand against this amendment to the plumbing license on the ground that under the definition sought by the plumbing industry the phrase "unit heaters" would include heaters which also cool, and therefore permit the plumbing contractor to do commercial air conditioning work.

Discuss Clearances for Oil Tanks

WILLIAM E. FAVRET, president of the Sheet Metal, Furnace and Air Conditioning Association of Columbus, Ohio, reports that there has been some misunderstanding among the members regarding the clearances required for a 275 gal basement fuel oil tank from a fire or flame in a basement type installation. In an effort to clarify the matter, he and other members of the association recently met with David Shapiro of the county building department and checked the requirements as listed in pamphlet No. 31 of the National Board of Fire Underwriters and form No. 17 issued by the State Fire Marshal. Mr. Favret states that NBFU requires a clearance of "not less than five feet horizontally from any fire or flame either in or external to the appliance being served by the tank." However, he says, the Fire Marshal's office requires that

installers abide by the requirement listed in its form No. 17, which is "a clearance of not less than seven feet to any fire or flame."

Featured speaker at the group's November meeting, held at the Jai Lai restaurant, was H. C. Gurney, chairman of the publicity and merchandising committee of the National Warm Air Heating and Air Conditioning Association.

Chicago Hears About Noise Control

THE PROBLEM OF noise control for air conditioning and ventilating systems was the subject of the December meeting of the Chicago chapter of the American Society of Heating and Air-Conditioning Engineers. Defining the need for better methods of isolating vibration at its source, Norman J. Mason, chief engineer, Vibration Mountings, Inc., said, "During the past years there has been an increasing need for improved isolation methods in the air conditioning industry. This has been a natural phenomenon as air conditioning systems have become more extensive and building construction lighter. The capacities of both fans and compressors have been increased to meet the specifications required to suit the new types of systems designed to meet these changes in construction and application. Therefore, we must solve vibration problems today that did not exist 20 years ago with slow speed compressors and large, heavy, slow speed fans. The 40 decibel limit for residential air conditioning equipment makes vibration control an essential engineering consideration."

Speaking on the advisability of selecting the vibration control best suited for a specific application, James J. Hughes, general manager, Industrial Sound Control, Inc., advised the engineers to select the size of noise reducing device specified in a catalog rather than attempt to incorporate any safety features on their own. Mr. Hughes pointed out that the type of noise developed, for example, by a blower for a ventilation system is usually of two types, high and low frequency. The vibration control is designed to handle a certain volume of low frequency noise plus a specified absorption of high frequency noise. If, in the attempt to place a safety feature in the installation, the engineer specified a larger vibration control, the ratio of high frequencies to low frequency noise would be upset, often with the result that certain types of noises would be more noticeable than if the smaller — but correct — vibration control was used.

Mr. Hughes also outlined six methods that can be used to reduce noise in duct systems created by air movement. He noted and explained the use of each of the following methods: 1) lined duct; 2) splitters; 3) egg crate; 4) lined plenum; 5) lined turns; 6) prefabricated noise trap.

(More association news on page 66)

YOU are invited to read and use AMERICAN ARTISAN

You who are making your livelihood from warm air heating, residential air conditioning or sheet metal contracting can best use the practical helps published in *American Artisan* each month.

- Last year's record is evidence that the *Artisan* covers these subjects most thoroughly: 175 feature pages on Air Conditioning and Warm Air Heating; 170 pages on Sheet Metal Fabrication and Contracting; 215 pages on Management Methods. That's 560 pages—in addition to useful departments such as Questions & Answers, New Products, Trade Literature, Association Activities, etc.

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Business

—a many splendored thing!

Beauty

Nesbitt Gas-fired Unit Heaters in their green hammertone finish have the smart styling that broadens their fitness for the most modern interiors—offices, stores, and showrooms—as well as for the usual industrial and commercial installations . . .

Utility

Seven sizes, with air capacities from 400 to 2900 cfm and heating capacities from 25,000 to 200,000 Btu per hour input, and their applicability to every type of gas and gas-air mixture give Nesbitt heaters a usefulness to cover practically every need . . .

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Their well engineered structural quality, corrosion- and heat-resistant metals, uniform distribution of high-volume low-temperature air, ease of installation, space-saving and service-free advantages add up to quick, clean, quiet, economical heat for the user. Nesbitt's full stocks immediately available means small investment, fast turnover, full profit for you.

Some of these features may be found in units of other makes, but all of them in one gas-fired unit heater makes Nesbitt your best choice.

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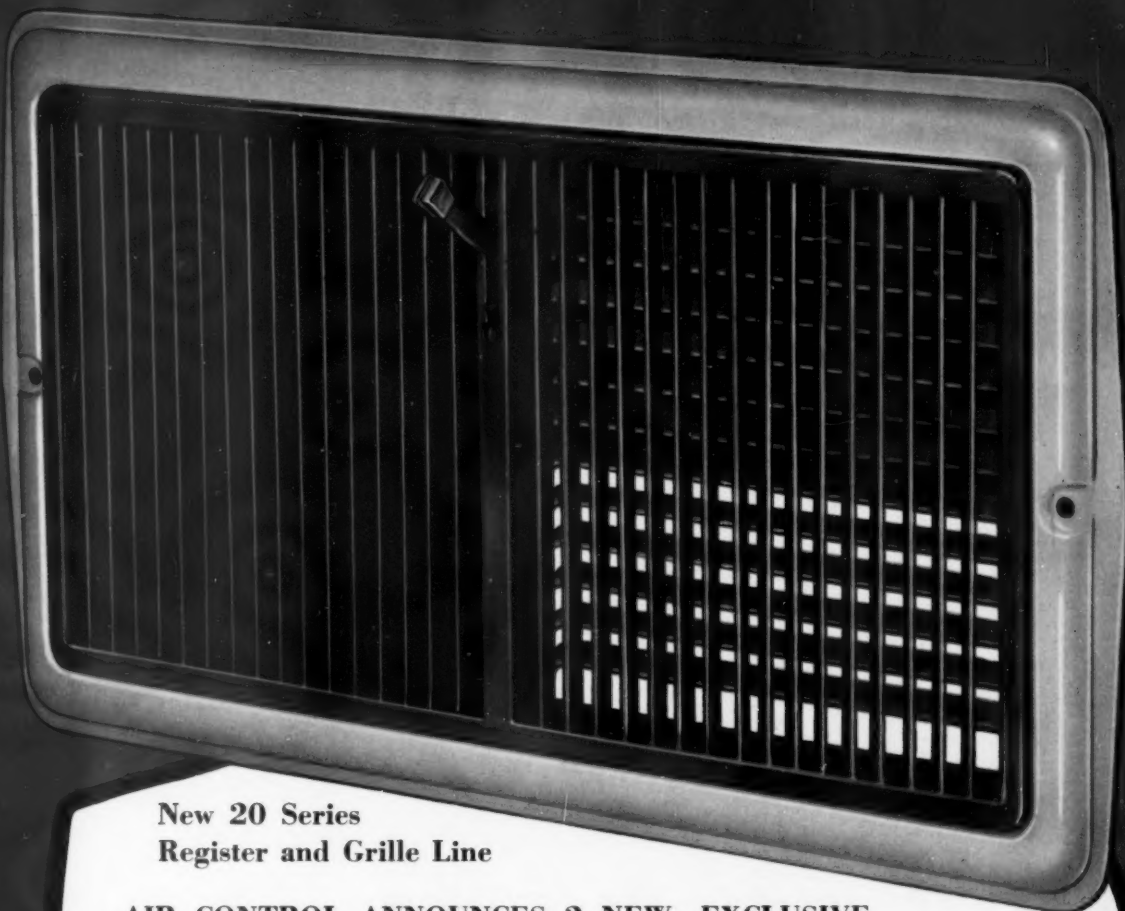
AUTOMATIC GAS-FIRED UNIT HEATERS

WITH THE ASSOCIATIONS

[Continued from page 64]

Coming Events

- Jan. 22-26—National Association of Home Builders, annual convention. Conrad Hilton Hotel, Chicago. John M. Dickerman, Executive Director, 1625 L St., N. W., Washington 6, D. C.
- Jan. 23-25—American Society of Heating and Air-Conditioning Engineers, Inc., annual meeting. Sheraton-Gibson Hotel, Cincinnati. A. V. Hutchinson, Executive Secretary, 62 Worth St., New York 13.
- Feb. 2-3—Sheet Metal and Warm Air Heating Contractors' Association of Indiana, annual convention. Hotel Severin, Indianapolis. Frank E. Anderson, Executive Secretary, 439 S. 17th St., Terre Haute, Ind.
- Feb. 5-8—New York Sheet Metal, Roofing & Air Conditioning Contractors' Association, annual convention. Hotel Utica, Utica, N. Y. Clarence J. Meyer, Executive Secretary, 567 Genesee St., Buffalo.
- Feb. 6-9—Fifth Annual Industrial Ventilation Conference. Kellogg Center, Michigan State University, East Lansing, Mich. James C. Barrett, Division of Occupational Health, Michigan Department of Health, Lansing 4, Mich.
- Feb. 16-18—Sheet Metal and Roofing Contractors Association of Minnesota, Inc., annual convention. Nicollet Hotel, Minneapolis. Tom Burnice, chairman, 4432 Chicago Ave., Minneapolis.
- Feb. 20-22—Ohio Sheet Metal Contractors Association, annual convention. Biltmore Hotel, Dayton. Robert L. Butler, chairman, 138 Ringgold St., Dayton.
- Mar. 11-14—Sheet Metal Contractors Association of Wisconsin, annual convention. Hotel Schroeder, Milwaukee. R. S. Schmieder, Executive Secretary, 8320 W. Blue-mound Road, Milwaukee.
- Mar. 22-23—Michigan Heating and Sheet Metal Association, Inc., annual convention. Hotel Fort Shelby, Detroit. N. J. Biddle, Executive Secretary 3035 E. Grand Ave., Detroit 2.
- Mar. 23-24—Sheet Metal, Air Conditioning and Roofing Contractors' Association of Pennsylvania, annual convention. Penn Harris Hotel, Harrisburg. E. W. Lieberman, Secretary, 1411 Merchant Place, Ambridge, Pa.
- Apr. 16-17—Sheet Metal Contractors Association of Illinois, Inc., annual convention. Abraham Lincoln Hotel, Springfield, Ill. Jay E. Harms, Secretary, 1619 N. Sheridan Rd., Peoria, Ill.
- Apr. 19-21—Gas Appliance Manufacturers' Association, annual meeting. The Greenbrier Hotel, White Sulphur Springs, W. Va. H. Leigh Whitelaw, Managing Director, 60 E. 42nd St., New York 17.
- May 7-9—Air-Conditioning and Refrigeration Institute, annual meeting. The Homestead, Hot Springs, Va. George S. Jones, Jr., Managing Director, 1346 Connecticut Ave., N. W., Washington 6, D.C.
- May 9-12—Sheet Metal Contractors' National Association, Inc., annual convention. Shoreham Hotel, Washington, D.C. J. D. Wilder, Executive Secretary, 170 Division St., Elgin, Ill.
- June 11-15—Oil-Heat Institute of America, Inc., exposition and annual convention. The Coliseum, New York, N.Y. R. H. L. Becker, Managing Director, 500 Fifth Ave., New York 36.
- June 18-20—American Society of Heating and Air-Conditioning Engineers, semi-annual meeting. Shoreham Hotel, Washington, D.C. A. V. Hutchinson, Executive Secretary, 62 Worth St., New York 13.
- June 21-24—Carolinas Roofing & Sheet Metal Contractors Association, annual convention. Ocean Forest Hotel, Myrtle Beach, S. C. Julian M. McKeithan, Secretary, 1219 Fairway Dr., Wilmington, N. C.
- July 19-22—Roofing and Sheet Metal Contractors' Association of Georgia, annual convention. General Oglethorpe Hotel, Savannah, Ga. B. L. Noblitt, Secretary, P. O. Box 1196, Augusta.



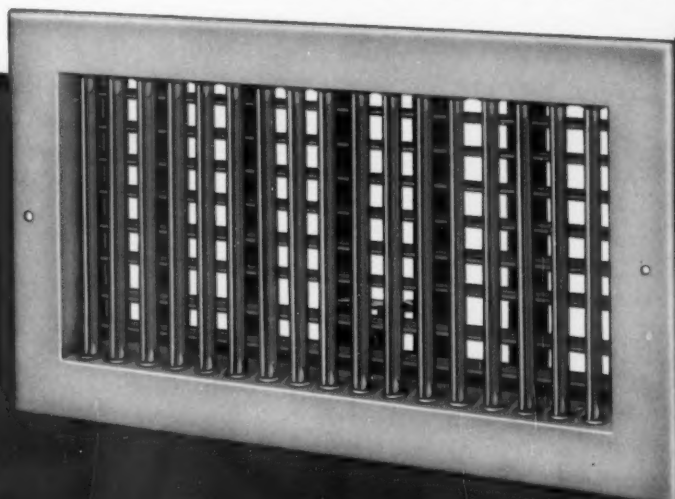
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Register and Grille Line**

**AIR CONTROL ANNOUNCES 2 NEW, EXCLUSIVE
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Air Control takes genuine pride in presenting two new lines of registers and grilles for 1956. They incorporate new and exclusive engineering features — available in no other registers and grilles at any cost. They include performance advantages that will assure top satisfaction for your customers. And in beauty of design and finish, they are in a class by themselves. We introduce them to you in the honest belief you will find them superior in every respect to any other register or grille you can obtain.

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COOPERSVILLE, MICHIGAN

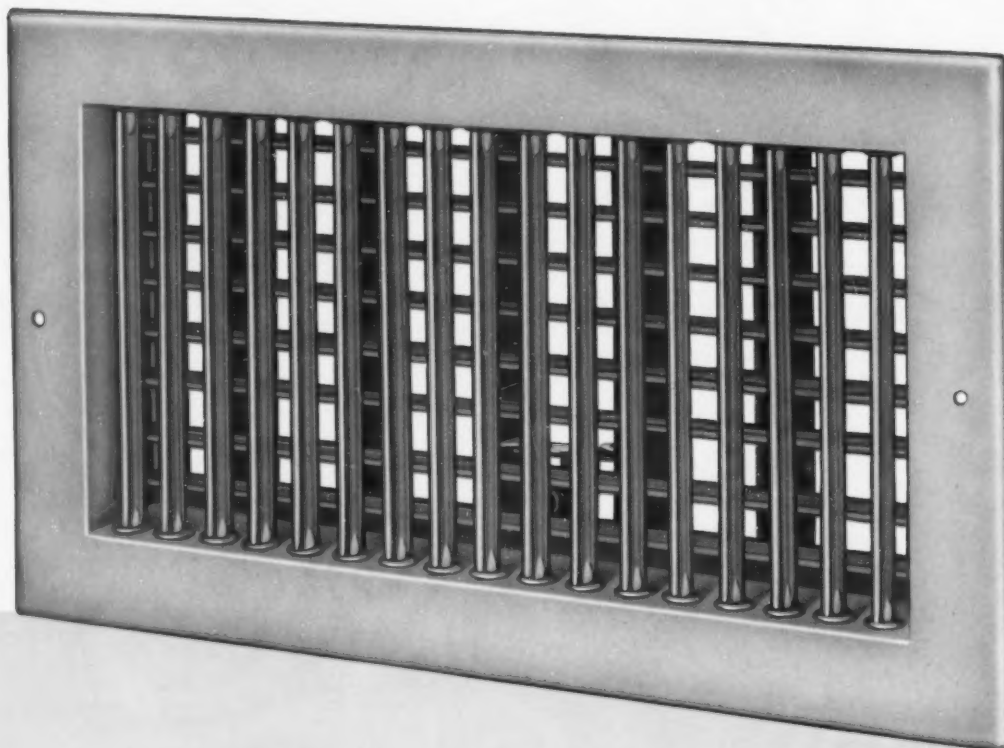


*New Multi-Trol
Register and Grille*



The only commercial ADJUSTABLE BAR TYPE REGISTER with "SHALLO-VALVE" operates with full efficiency in standard ducts

New Air Control Multi-Trol 4-Way Adjustable BAR REGISTER With Exclusive "SHALLO-VALVE" FOR TOP EFFICIENCY



Air Control presents another first — The Multi-Trol commercial type, 4-way control, bar type register and grille line.

Registers feature the outstanding "Shallo-Valve" . . . an exciting new valve that offers advantages never before possible with a commercial type register. It occupies a minimum of space in the duct — won't obstruct air flow, even in $3\frac{1}{4}$ " risers. Butterfly type valve is opposed action — positively controlled by removable operator key. When closed, louvers are sealed by air pressure — won't leak or whistle. "Shallo-Valve" is exclusive on Air Control Multi-Trol Registers.



Red area shows how standard commercial valve greatly reduces free area in $3\frac{1}{4}$ " duct.

Register and Grille bars are built with an air foil contour to reduce resistance and noise . . . and provide positive 4-way air control. They are securely sealed to the margin, yet adjust easily with an adjusting key, if necessary. Margins have rounded corners, smash welded for extra strength and more attractive appearance.

Multi-Trol Registers and Grilles are available in a wide range of sizes and styles. See your jobber for complete information on this tremendous new line.

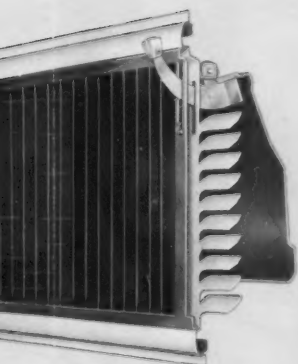
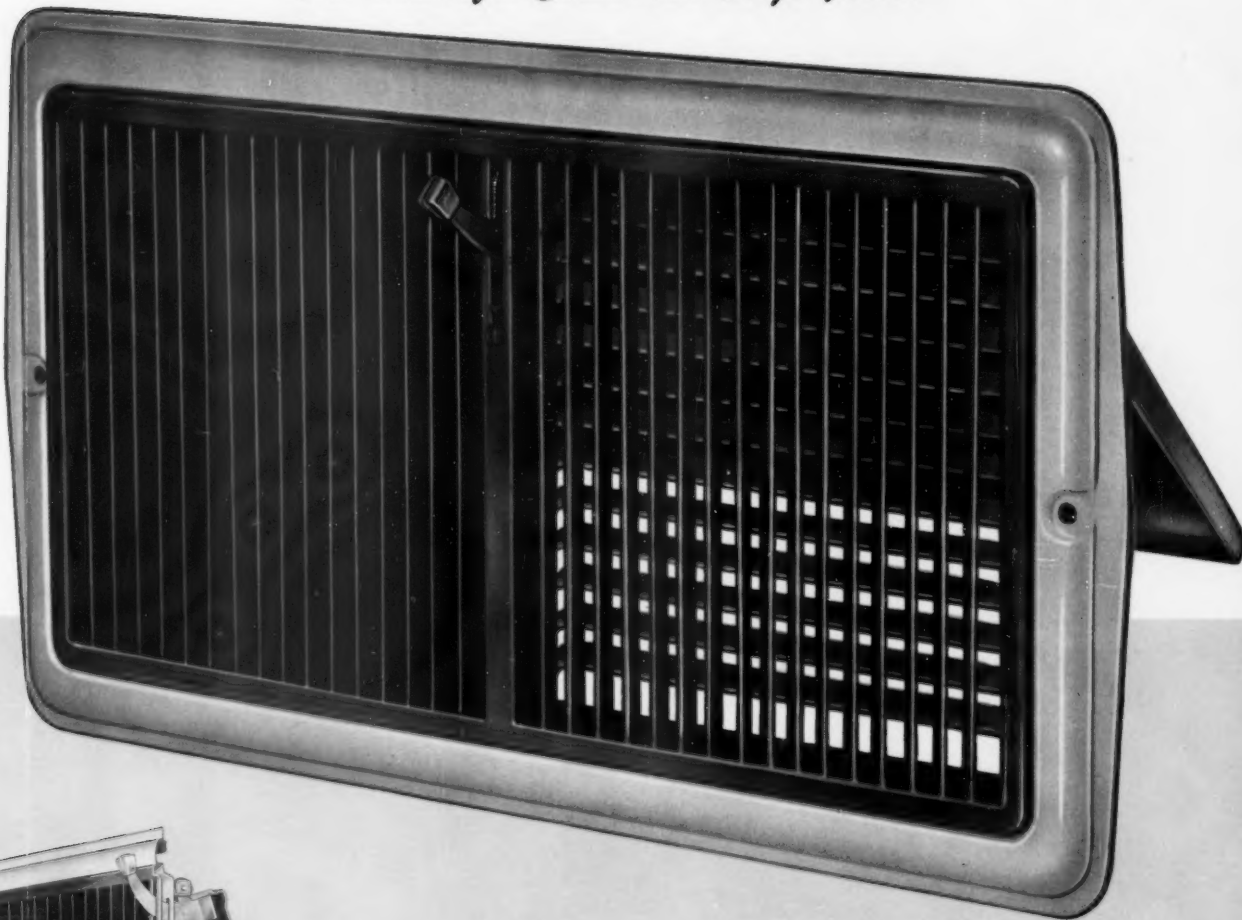
FOR COMPLETE INFORMATION ON THE ABOVE REGISTERS, SEE YOUR JOBBER OR WRITE FOR NEW, 4-COLOR 1956 CATALOG SHOWING THE COMPLETE LINE



Front and easily adjusted pattern. give a modern look to any Air Control Register.

The ALL NEW REGISTER that gives positive 4-way air control
at any damper setting — at an unbelievably low price

New NO. 20 SERIES REGISTERS AND GRILLES
New Beautiful Chameleon Beige Finish



Front and back fins can be
easily adjusted for any desired air
pattern. Fins are factory set to
provide a multi-flow pattern —
Air Control exclusive.

This new Air Control No. 20 series is radically different — an engineering first — a styling first. It maintains the proper 4-way air pattern regardless of what volume the damper is set for. There is no register like it on the market at any price. Yet it costs no more than old-fashioned, single directional registers.

Vertical front fins and horizontal back fins on the No. 20 series are easily adjusted. The home owner, himself, can make these adjustments for either the heating or cooling season. The single damper valve may be set in any position without changing the desired air pattern.

See this beautiful new register line today at your jobber's. The efficient engineering and smart styling of the No. 20 series will assure a better installation for you and more satisfaction for your customers every time.

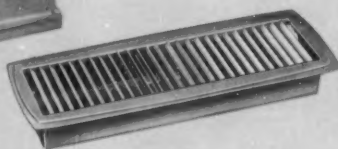


THE AIR CONTROL LINE IS THE FINEST LINE YOU CAN USE ON ANY AIR CONDITIONING, HEATING OR COOLING INSTALLATION

FOR PERIMETER INSTALLATIONS



Baseboard Perimeter Diffusers

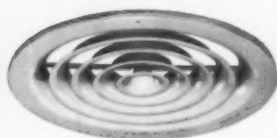


Floor Perimeter Diffusers



Sidewall Perimeter Diffusers

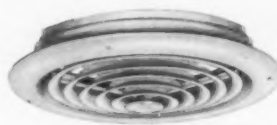
FOR CEILING DIFFUSER INSTALLATIONS



Flush Type Diffusers



Step Down Type Diffusers

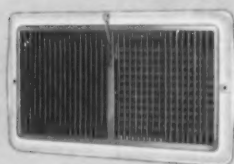


Adjustable Type Diffusers



Diffuser Dampers

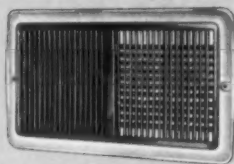
FOR AIR CONDITIONING INSTALLATIONS — NEW No. 20 SERIES



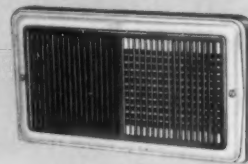
Double Deflection
Sidewall Registers



Double Deflection
Baseboard Registers

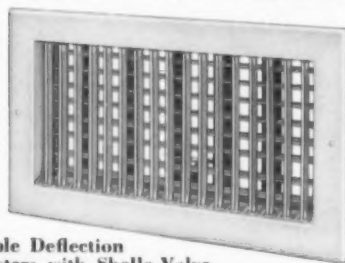


Double Deflection
Sidewall Grilles

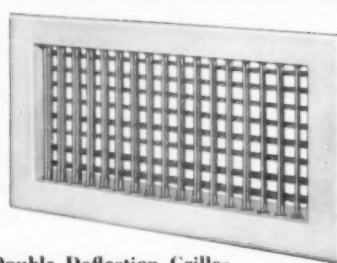


Double Deflection
Baseboard Grilles

FOR 4-WAY ADJUSTABLE BAR INSTALLATIONS



Double Deflection
Registers with Shallo-Valve

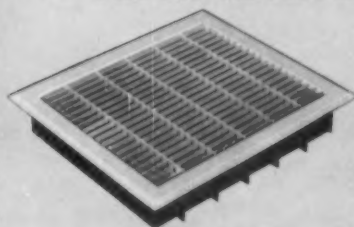


Double Deflection Grilles

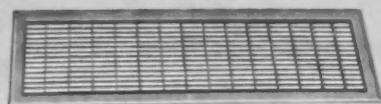
SHALLO-VALVE

This new opposed action valve is so shallow it can be used with standard fittings and duct work. Permits unobstructed air flow, even with $3\frac{1}{4}$ " risers. Easily adjusted with a key from the face.

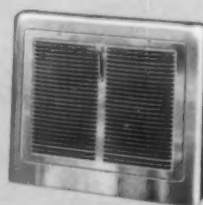
FLOOR REGISTERS



Floor Registers



Floor Return Air Faces



Baseboard
Gravity Registers

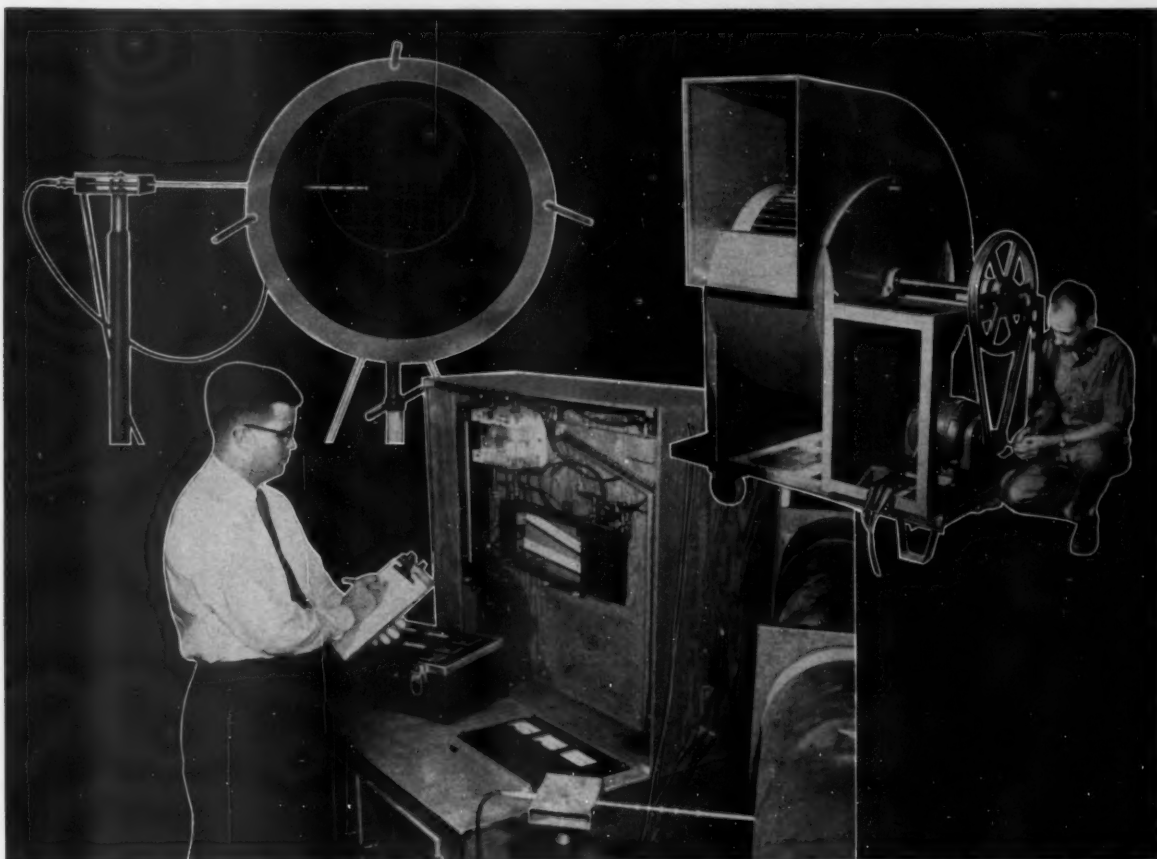


Vision Proof
Grilles



AIR CONTROL PRODUCTS, INC.
COOPERSVILLE

MICHIGAN



Peerless Development Engineer Richard Thompson (at control board) guides unit through development and George Goldner conducts final inspection.

VERIFIED BLOWER PERFORMANCE

● It just makes good sense to specify Peerless. Every fan or blower leaving our plant is unconditionally guaranteed to meet all established industry test codes (NAFM or PFMA). To an engineer, guaranteed performance means specifying without doubt—to a contractor it means good performance and no callbacks.

OUTSTANDING PERFORMANCE. The outstanding service records of Peerless fans and blowers stem from excellent design and thorough tests in every step of development and manufacture. A minimum of eight, 20-point determinations are made during the development period alone.

100% INSPECTION. Every unit (including the job-matched Peerless custom-built motor) receives 100% inspection before it leaves our plant. Wheel alignment and lubrication are checked . . . variable pitch pulleys are adjusted to correct motor RPM for exact

CFM . . . angle of discharge is set . . . each unit is ready to go when you receive it.

COMPLETE LINE. There is a Peerless fan or blower for virtually every application. Complete data is catalogued for easy reference. Peerless Bulletin SDA-160 shows fans and forward curve blowers. Bulletin SDA-200 gives complete data on backward curve blowers (NAFM) from 12½" to 36½". These two bulletins will help you solve most air-moving problems. To get your copy, use the coupon below. Dimension prints are available on request.



FAN AND BLOWER DIVISION

THE PEERLESS ELECTRIC COMPANY

1405 W. MARKET ST. • WARREN, OHIO

FANS • BLOWERS • MOTORS • ELECTRONIC EQUIPMENT

THE PEERLESS ELECTRIC CO.

WARREN, OHIO

☐ Send me Bulletin SDA-160.

☐ Send me Bulletin SDA-200.

NAME.....

TITLE.....

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ADDRESS.....

There's a

CRESCENT SLIP-JOINT PLIER

for every job!



● Crescent offers a wide selection of styles and sizes in this widely used plier type. All are drop-forged from special analysis steel and finished in bright plate. They have sharply milled teeth, comfortable handles and smooth working joints. The joint bolt and nut are turned from solid bar steel and case hardened. You simply can't find better pliers anywhere.



CRESCENT and CRESTOLOY TOOLS are sold by hardware dealers and industrial distributors everywhere. Look for the bright yellow Crescent Display panels and select from one of the world's greatest assortments of quality hand tools.

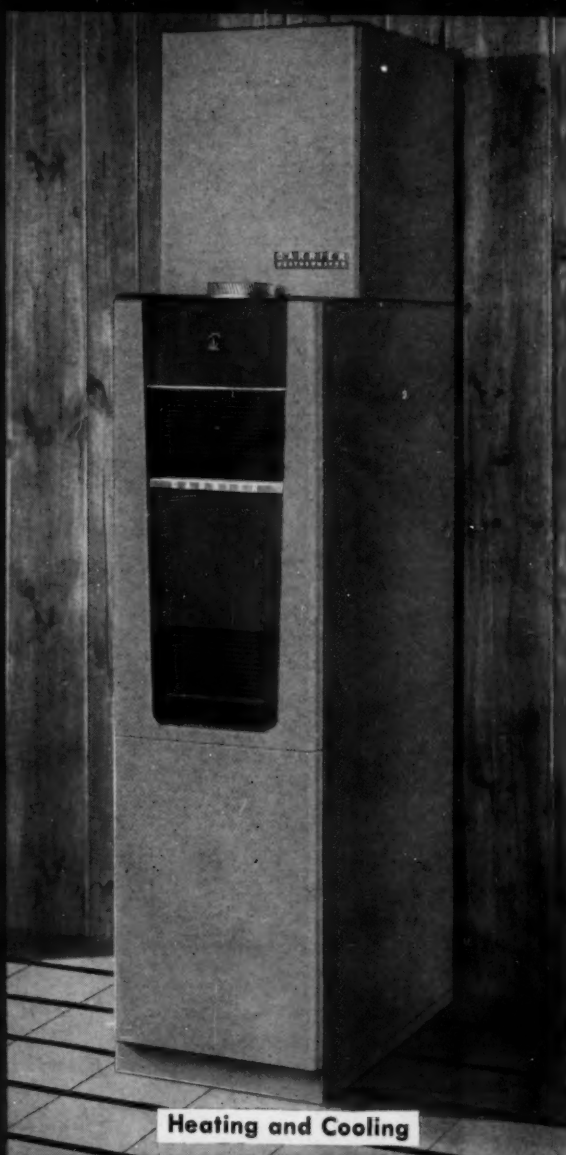


Crescent is our trade-mark, registered in the United States and abroad, for wrenches and other tools. Sold by leading distributors and retailers everywhere and made only by
CRESCENT TOOL COMPANY, JAMESTOWN, NEW YORK

Now there are *Carrier furnaces* for you to sell, too!



Heating



Heating and Cooling

THE NEW CARRIER WINTER WEATHERMAKER

...the furnace with a future

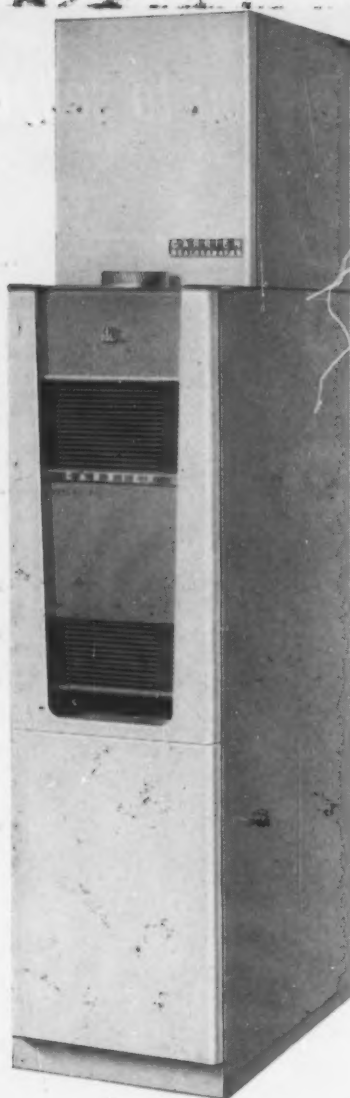
Newest additions to line will give you

Carrier furnaces will end dealers' slack months

With these new Winter Weathermakers, Carrier brings you a 365-day-a-year busy season. As a Carrier dealer there isn't a home heating or cooling problem you can't solve. To begin with, there's a Winter Weathermaker for every type of home, every climate, every kind of gas or oil—33 models in all.

And the Winter Weathermaker is "the furnace with a future" because it's all set for summer air conditioning—with matching coil casings, ample fan capacity, and a special heating and cooling thermostat. Future business in summer cooling is built right into each furnace.

So cash in on Carrier, the *year-round* profit line! To start the money pouring in, call your nearest Carrier distributor. You'll find his name listed in the yellow pages of your classified telephone book. Or write direct to Carrier Corporation, Syracuse, New York.



← This is the new Carrier Winter Weathermaker—"the furnace with a future." The inexpensive coil casing (shown on top) replaces the old-fashioned plenum and the cooling coil may be inserted during the initial installation or at some future date. This upflow furnace is available for either oil or gas and in capacities from 75,000 to 210,000 Btu/hr input.



Carrier Downflow Winter Weathermaker
—available gas or oil-fired in capacities from 75,000 through 150,000 Btu/hr input. Matching cooling coil section fits neatly under the furnace.



Carrier Horizontal Winter Weathermaker
—available gas or oil-fired in capacities from 85,000 to 231,000 Btu/hr input. Matching cooling coil section fits in ductwork as shown.



New Weathermaker Control Center—exclusive with Carrier. Instant switching from heating to cooling. The word "COOL," on thermostat, reminds owner that he can add cooling to his furnace.

America's leading air conditioning year-round profits!



Carrier Year-round Weathermaker—for new homes or to replace worn-out furnaces. Heats and cools an entire house. Water-cooled or air-cooled. Uses gas or oil for heat. Capacities from 1.7 to 7.5 tons.



Carrier Summer Weathermaker—for homes with steam or hot water heat or with no central heat at all. Has its own fan and filter. Uses a separate duct system. Available in capacities from 2 to 5 tons.



Carrier Conversion Weathermaker—for existing homes with upflow furnaces. Fits any standard warm air furnace. With air-cooled refrigerating section, it comes in capacities from 2 to 5 tons.

Carrier Conversion Weathermaker—for existing homes with downflow furnaces. Fits neatly below the furnace which is raised only about 12 inches. Available from 2 to 5 tons. Requires no water.

Carrier Conversion Weathermaker—for existing homes with horizontal furnaces. Fits in duct beside furnace. Air-cooled refrigeration section located outdoors. From 2 to 5 tons capacity.

To help pre-sell your customers on Carrier comfort, Dave Garroway and Arlene Francis will reach millions of prospects with the Carrier story on their NBC-TV shows "Today" and "Home."



**AIR CONDITIONING
REFRIGERATION
INDUSTRIAL HEATING**





by *Sequoia* *

THE NEW PACER

FORCED AIR FURNACE
at
**COMPETITIVE
PRICES**



With all the quality features heating dealers have come to expect in a **SEQUOIA GAS FURNACE**



PACER design and production is particularly suited to your builder customers who need central forced air heat for their tract homes, at the most moderate possible cost.

SEQUOIA GUARANTEED assures you of this national manufacturer's traditional quality—in basic raw materials, choice of accessory parts, and operating performance. It is available in the two sizes—75,000 and 112,000 btu—most often required by builders of popular-price residential developments.

Write today for complete Pacer specifications and prices



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KEY SEQUOIA DEALER**

UNIVERSITY HEATING & AIR CONDITIONING
of San Diego, California

Since 1926 University has been the major installer in California's third largest market. Emphasis upon quality products and quality service has developed its staff to 155 employees—and its volume to 2,000 new furnace installations a year! Sequoia is proud to be a key supplier to this key U.S. dealer.

SEQUOIA MANUFACTURING CO.

1000 BRITTAN AVENUE • SAN CARLOS, CALIFORNIA

Manufacturers of Upright, Reverse-Flow and Horizontal Gas Furnaces



Here's the story...

ON



**NEW SMALLER, BETTER MOTORS
1 TO 30 H.P.**

In this revealing book, Century shows how and why the *New Standard*, smaller motors actually out-perform the larger, heavier *Old Standard* models.

These trim, compact "New Standards" give you weight savings up to 40% . . . plus space savings and easier installation. Dead weight and dead air space are eliminated. The "active materials," such as iron and copper, are designed to give greater efficiency than ever before. New synthetic insulating materials give greater dielectric strength and uniformity.



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OF THIS VALUABLE DATA BOOK...!**

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1806 Pine Street, St. Louis 3, Mo.**

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MOTORS
1/20 to 400 H.P.**



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STOP!

... Shop for It's Right Here IT'S MONCRIEF — for Better... More Profitable Business

5 Ton Year 'Round
Basement-Utility Unit.
Water Cooled.
Gas or Oil Fired.
175,000 to 140,000 B.T.U. Input.

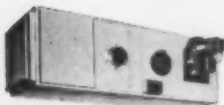


Utility Room
Winter Air Conditioner.
Gas or Oil Fired.
5 Gas Models: 65,000 to
140,000 B.T.U. Input.
3 Oil Models: 84,000 to
123,000 B.T.U. at Bonnet.



Gas Fired
Unit Heater
5 Models: 60,000 —
230,000 B.T.U. Input.

Oil Horizontal Furnace.
4 Models: 85,000, 101,000,
123,000 and 224,000 B.T.U.
at Bonnet.



Oil Conversion Burner.
4 Models: 0.75 to 13
Gallons per Hour.



Incinerator
4 Models: Gas Fired —
High Input with Timer, High
Input without Timer, Pilot
Dehydration — and without
Gas Burner.



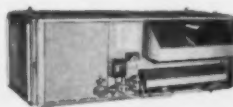
Counterflow
Year 'Round Unit.
2 Ton is Air or Water
Cooled with 100,000 B.T.U.
3 Ton is Air Cooled
with 140,000 B.T.U. Input.



Gravity Furnace.
Gas or Oil Fired.
3 Gas Models: 86,000,
105,000 and 130,000 B.T.U. Input.
2 Oil Models: 67,000
and 89,000 B.T.U. at Register.



Coal Fired
Winter Air Conditioner
Readily Converts for
Gas or Oil
3 Models:
22", 24" and 27"



Gas Horizontal Furnace.
4 Models: 80,000,
100,000, 120,000, and
140,000 B.T.U. Input.



Year 'Round
Basement-Utility Unit.
Air or Water Cooled.
Gas or Oil Fired.
2 Tons — 100,000 B.T.U. Input.
3 Tons — 140,000 B.T.U. Input.



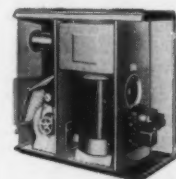
Air Condensing Unit of
Air Cooled, Add-On
Summer Air Conditioner.
2 or 3 Ton Capacity.
For Attachment to Duct —
Installed Cooling-Coil
(Shown Above)



Cooling Coil of
Air Cooled, Add-On
Summer Air Conditioner.
Installs in Air Discharge
Duct of Forced Air Furnace.
Attaches to Air Condensing
Unit (Shown Below)



Water Cooled, Add-On
Summer Air Conditioner
2, 3 and 5 Ton Capacities



Basement Type
Winter Air Conditioner.
Gas or Oil Fired.
9 Gas Models: 76,000 to
250,000 B.T.U. Input.
7 Oil Models: 84,000 to
224,000 B.T.U. at Bonnet.



Counterflow
Winter Air Conditioner.
Gas or Oil Fired.
5 Gas Models: 65,000 to
110,000 B.T.U. Input.
3 Oil Models: 84,000 to
123,000 B.T.U. at Bonnet.

Use the MONCRIEF Complete Line of SUREFIT Carton Packed Pipe and Fittings

The money-saving way to make better
installations, more quickly, is with Moncrief Snap
Lock Pipe, Duct,
Stack and Fittings.
Now available in 5 foot,
long lengths for
installations requiring
long runs.
Carton Packed for
easier handling and storage,
protection against corrosion.
Write for Illustrated
Catalog.



MONCRIEF

— Competitively Priced

Bigger Profit in 1956 on These Pages!

IT'S **MONCRIEF**

— with the Greater Selection of Better
More Versatile, More Attractive

... Year 'Round Air Conditioning Units
... Summer Cooling Equipment
... Winter Air Conditioning Units
... Furnaces ... Unit Heaters ... Incinerators

Shop — compare — and you'll choose Moncrief for better profit in 1956!

Moncrief Steps Ahead with the More Complete Line for 1956

Whatever you need for heating or air conditioning, you'll find it — built better, priced competitively and backed by Moncrief's 60 years of manufacturing experience.

And you can select the right Moncrief unit for your job from: — Furnaces that burn gas, oil or coal — Basement, Utility, Counterflow and Horizontal Winter Air Conditioning Units — 2, 3 and 5 Ton Year 'Round Air Conditioning Units that burn either gas or oil, with a choice of air or water cooled refrigerant circuits in the 2 and 3 ton sizes — 2 and 3 ton, Air Cooled, Remote, Add-On Summer Air Conditioners, and 2, 3 and 5 Ton Water Cooled, Add-On Summer Air Conditioners — Gas Fired Unit Heaters that provide a complete range of capacities with but 5 models — Gas Conversion Burners, from 50,000 to 300,000 B.T.U. input, with 3 models — Oil Conversion Burners, from 0.75 to 13 gallons, with 4 models — and Incinerators, with or without, the gas burner.

Moncrief Steps Ahead with Year 'Round Air Conditioning for 1956

For virtually any home, you can specify a factory engineered Moncrief Year 'Round Air Conditioning Unit that supplies both heated and cooled air in balanced proportion from the same compact cabinet — even with 5 tons of cooling capacity.

The new 5 Ton Moncrief Year 'Round Unit combines an hermetically sealed, water cooled refrigerant system with 175,000 B.T.U. heating that can be either gas or oil fired. You can also order this unit with 140,000 B.T.U. input gas or oil heating, when it is advantageous to lessen the amount of heating.

The Moncrief Counterflow Year 'Round Air Conditioner is a revolutionary "first" in single-cabinet combination units. You can now install a down-flow year 'round unit that is especially engineered for basementless, "perimeter" applications. The 2 Ton unit is either air or water cooled, the 3 Ton air cooled only.

Moncrief Steps Ahead with Horizontal Gas Fired Furnaces for 1956

You will realize an entirely new concept in heating installation with Moncrief's new, complete line of Gas Fired Horizontal Furnaces.

The versatile features of these low, compact units permit their installation in previously impossible spaces. The burner can be installed on either side, or at either end — the flue outlet on either side — burner and flue outlet on opposite sides — flue collar either horizontal or vertical — flue pipe in any direction desired.

Moncrief Will Step Your Profit Ahead in 1956

You will gain from ability to select the proper type, size and capacity of unit from Moncrief's full line. You will gain from Moncrief's "years ahead" innovations in design. You will need less inventory — because the majority of Moncrief units are approved for either gas or oil, or provide more capacities with less models. You will also gain, because Moncrief units are manufactured, and sold, in greater volume — so that the price is competitively right!

You will profit, moreover, because for over 60 years Moncrief has been known as "the furnace man's furnace" — with units that install easier and quicker, and afford extra years of service-free operation.

So start 1956 right — for bigger profit all year 'round. Call your Moncrief Wholesaler, today!

MONCRIEF — Built Right! Priced Right! Approved for Gas or Oil!

THE HENRY FURNACE COMPANY • Medina, Ohio

HEATING AND AIR CONDITIONING UNITS



FURNACE PIPE AND FITTINGS

for Today's Competitive Selling!



Select Your 1956 REGISTERS *and* GRILLES

**The U.S. PERIMETER FAMILY
CANNOT BE EQUALLED**

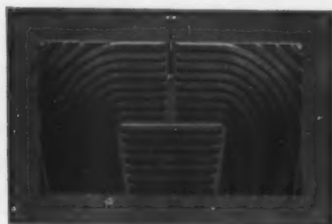


The NEW No. 1000 BASE DIFFUSER

Provides the Beauty, Efficiency, and Silence preferred by the Most Discriminating Home Owners.

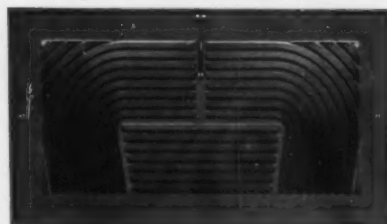
No. 105 DIFFUSER SIDEWALL and No. 106 DIFFUSER BASE REGISTERS
Ready for Delivery. YES—ALL 3 Sizes—10 x 6—12 x 6—14 x 6

No. 105 10 x 6 Diffuser Sidewall

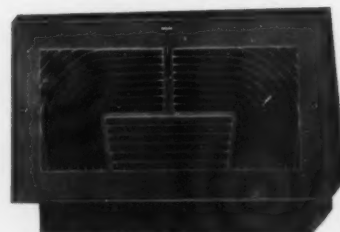


The GROUP of DIFFUSER and BASE (Out-of-Wall) REGISTERS is the Original Development of Design ENGINEERS with the "KNOW-HOW". You should believe it.

**The LINE with the
180° "EVEN-FLOW"
SUNBURST DIFFUSION**



No. 106 BASE DIFFUSER

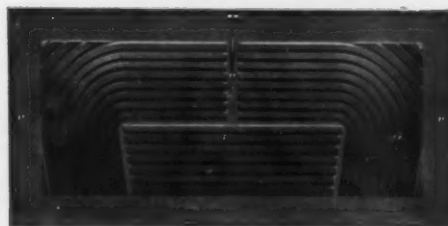
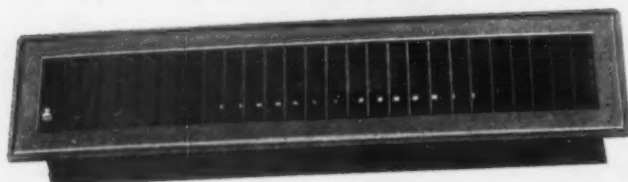


Out-of-Wall Style Furnished in
10 x 6, 12 x 6, 14 x 6

**Beautiful "Lookers"
and Brilliant Performers**
No. 105 14 x 6 Diffuser Sidewall

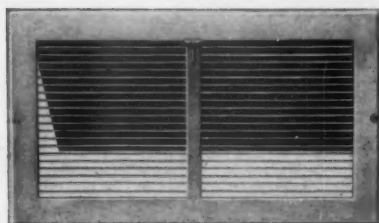
The No. 410 U. S. DIFFUSER FLOOR REGISTER

The Sturdy, efficient leader of Perimeter floor registers



Greatest Complete Lines on Earth

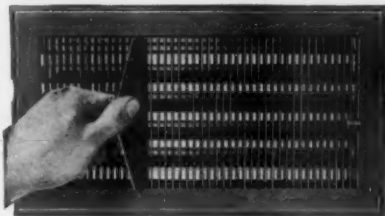
OTHER OUTSTANDING LEADERS in the A-C REGISTER FIELD



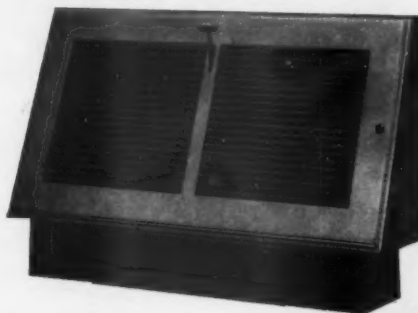
No. 153
U. S. A. C.
SINGLE VALVE
REGISTER

Stands out before all other lines in the Low Cost Field, yet Fine enough for the Best Type of A-C Systems.

No. 256
U. S. MULTI-
VALVE
A-C
REGISTER



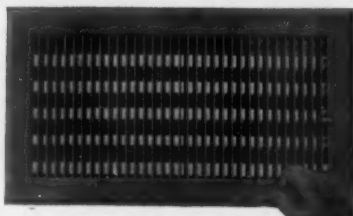
No Multiple Valve A-C Register can compare with the world-Renowned No. 256. Won't you try them.



No. 163^{3/4}
U.S. OUT-
OF-WALL
A-C
REGISTER

The No. 163^{3/4} is the "Handy-Man" of All Registers. It gets that Old House job. Sets outside of the wall. You don't have to cut. "WOW! What a help".

No. 249
U.S. ADJUST-
ABLE BAR
REGISTER



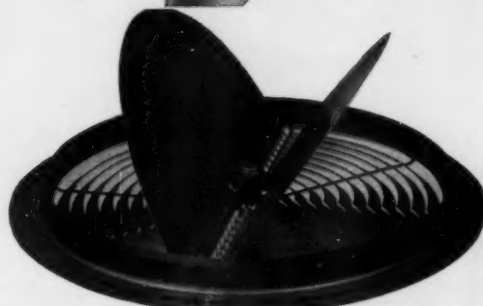
Specially adapted to combination heating and cooling systems for complete, quick switch from heating to cooling.

No. 500 SERIES U.S. ROUND
CEILING DIFFUSERS



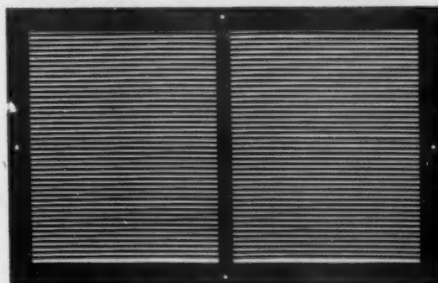
Showing the best screw-driver control of bi-valve damper

No ball chains or tempers to lose.



Rear view of the No. 500 Round Ceiling Diffuser showing the direct, simple operation of the No. 800 Bi-Valve Damper.

No. 177 U.S. A-C GRILLE



This neat grille is made in all popular sizes for use on residential and commercial A-C systems.



UNITED STATES REGISTER COMPANY

BATTLE CREEK, MICHIGAN

MINNEAPOLIS • KANSAS CITY • ALBANY

SOLD BY LEADING JOBBERS FROM COAST TO COAST

Smartest promotion in

—AND YOU'RE THE STAR!



THIS MAN

wants to show you how easy
it is to give your family
year-round AIR CONDIT

Worthington Climate Man strips mystery from
air conditioning with unique "see-it-yourself"
demonstration in your own home

No matter what you've read—or heard—about home air conditioning, it's no substitute for a Worthington CLIMATE MAN's unusual home demonstration. This man can actually show you what your air-conditioned home will be like. Think of being able to cool off hot summer temperatures... keep humidity at a comfortable, healthful level... shut out unhealthy dirt, pollen and dust. This is the pleasant picture your Worthington CLIMATE MAN will preview for you. In full-color transparencies—easy to look at—you'll see the Worthington

residential unit that fits your home. You'll watch a dust filter trap dust and dirt to housework... and keep! Then you'll see the CLIMATE MAN—watch him work to even and operate the V. If you don't know all the way to get them, then by business installations to your home... and you send for free questionaire air conditions your home ing and Refrigeration D

WORTHINGTON

CLIMATE DRIVERS
TO INDUSTRY, BUSINESS
AND THE HOME



Picture your home as it's quickly sketched by the CLIMATE MAN to show you exactly where and how Worthington's year-round air conditioner will do the best job for you. You'll also see how sketch out the complete cost picture, including operating expenses.



Air conditioning without water is something else you'll learn about from the CLIMATE MAN. Worthington's new "air-cooled" unit keeps the hottest homes cool—without adding to your water bill. And it gives Worthington supply the complete system for every need.



Filter-test dramatizes efficient filtering act Worthington air conditioning. Here, an actual set Worthington vacuum-type filter shows a full of Imagine all the air in your home kept clean and Worthington air conditioning.



Scientists as well as homes can call on the C Series, offices and restaurants like Mallye Bonnard's (above) have been building sun with Worthington air conditioners for years. Insign desklet can help you do it, too.

as
seen
in... **The Saturday Evening
POST**

Here's how 4½ million Saturday Evening Post families will meet the Worthington CLIMATE MAN on March 17, 1956. That's when Worthington's 1956 consumer campaign kicks off with a big POST spread announcing air conditioning's unique home demonstration designed to help you sell. Full-scale campaigns in POST, HOUSE AND GARDEN, BUSINESS WEEK, HOUSE AND HOME and leading trade publications carry this potent story straight to your prospects in all fields.

air conditioning history

Unique, new way to demonstrate Worthington's complete line casts you as the CLIMATE MAN

Here's the sales idea you've been waiting for!

Worthington's demonstration kit gives you the easiest-to-tell, easiest-to-sell air conditioning story of the year. It makes you the Worthington CLIMATE MAN—makes you an air conditioning expert, equipped to carry your story right into any prospect's home, office or store . . . and tell it in a way no competitive dealer can match.

HOW THE NEW DEMONSTRATION SELLS

In full-color transparencies you'll show prospects exactly how their Worthington air conditioner will look . . . how it will fit into their home or store.

Actual parts of the unit—like coils and filters—demonstrate the quality and operation of Worthington equipment. And the Climate Kit helps you blueprint your prospect's specific installation . . . work out cost and payment figures right before his eyes.

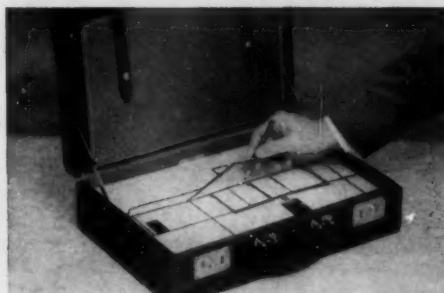
PROMOTIONAL PIECES BACK YOU UP

The smartest, hardest selling ad campaign we've ever run (see left page) is only part of the story. You get interest-building TV and radio spots, newspaper mats, billboards and car cards, merchandising displays, mailing pieces and sales literature too. They all tell your prospects that the one man best equipped to give them the straight facts about air conditioning is their Worthington CLIMATE MAN. That's you!

COMPLETE LINE MORE VERSATILE THAN EVER

This year Worthington tops the industry with the smartest idea in air conditioning—the remarkable space-saving FLEXI-COOL unit that fits *anywhere*. With Worthington units to fit every application—and smart, compact styling a feature of every unit—you've got the finest, most versatile line as well as the smartest promotion in the industry. Call your Worthington District Representative today. Then, revise your sales forecasts upwards and go to work. Worthington Corporation and Refrigeration Division, Section A.6.20-A, Harrison, N. J.

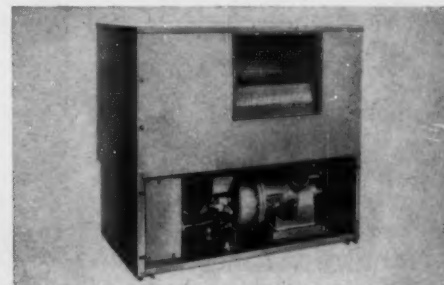
A-6-20



NEW KIT HELPS YOU show each prospect his own custom-made Worthington installation. Your quick sketch shows him where and how his Worthington unit will work best.



FLEXI-COOL SECTIONAL AIR CONDITIONING. Fit sections together as a unit or install them separately *anywhere*. Saves stocking space for you.



WORTHINGTON AIR-COOLED UNITS. Air conditioning without water is another Worthington extra. Perfect for water-short areas.

WORTHINGTON

THE BEST FRANCHISE . . .
THE MOST COMPLETE LINE



EVERYBODY WILL BE
LOOKING FOR THIS SEAL

THE **Finest...**

REGISTERS, GRILLES and DIFFUSERS

FOR HOME AND COMMERCIAL
INSTALLATIONS OF EVERY TYPE

**ARE ALL AVAILABLE FROM H&C
THE SOURCE SO MANY PREFER**

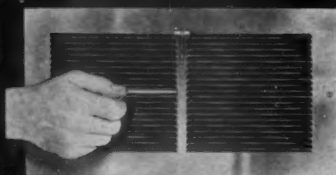
Yes, and once you have become a customer, we are confident you, too, will prefer this one highly reliable source for all your needs. Here's what you will find: 1. Product-wise, we are at the top of the heap in efficient design, quality construction, and fine appearance. 2. It's the most complete line anywhere, providing the exact register, grille or diffuser to help you meet and beat competition under all circumstances. 3. Each item is packaged individually and cartoned in lots best suited to your convenience in handling and storing. 4. We do our utmost to provide prompt shipment of practically all standard items. 5. We bend every effort on every order, large or small, towards making your connection with us as pleasant and as profitable as it possibly can be. Give us a trial, won't you?

Ask your H&C Jobber for a copy of our current catalog "A", or write to us if you do not have one.

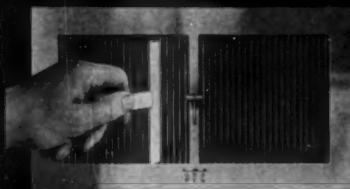
HART & COOLEY MANUFACTURING CO.

500 EAST EIGHTH ST., HOLLAND, MICHIGAN
IN CANADA: HART & COOLEY MANUFACTURING CO.
FORT ERIE, ONTARIO

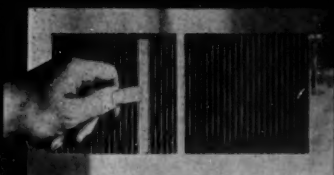
PRODUCTS OF THE WORLD'S LARGEST AND MOST PROGRESSIVE



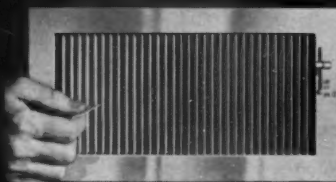
No. 74 — The low-cost, **QUALITY** air conditioning register.



No. 75 — Only air conditioning register with the **TURNING BLADE VALVE**.



No. 76 — Fin type face, air conditioning register with multi-shutter valve — very popular.



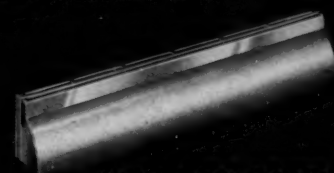
No. 88 — Adjustable bar type, air conditioning register with multi-shutter valve. Sizes up to 30" x 24".



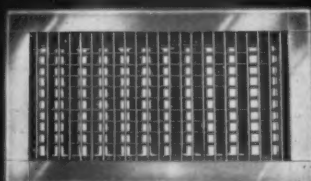
No. 44 — **CONTINUOUS BASEBOARD DIFFUSER (PERIMETER)** Requires no tools to assemble or disassemble. Installed in multiples of 2' and 4'. Balancing damper available.



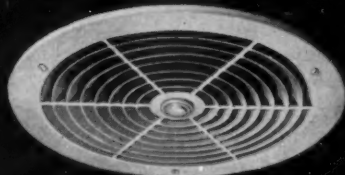
No. 405 — **BASEBOARD DIFFUSER (PERIMETER)** has floor opening, damper adjustment for balancing.



No. 452 — **HIGH CAPACITY BASEBOARD DIFFUSER (PERIMETER)** blankets wall of average room. Balancing damper available.



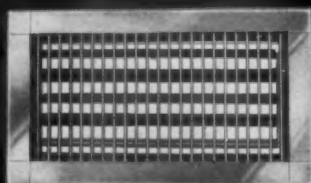
TRIPL-AIRE REGISTERS and GRILLES for commercial installations, provide every combination of deflections desirable.



CEILING DIFFUSER — Made in 5 popular sizes. Butterfly damper with balancing control available.



No. 401 **SIDEWALL DIFFUSER (PERIMETER)** blankets wall of average room. Has volume control valve.



FIXT-AIRE RETURN AIR REGISTERS and GRILLES — perfect companion items to **TRIPL-AIRE** line.



No. 411 **FLOOR DIFFUSER (PERIMETER)** has opposed louvers for perfect air pattern. Positive balancing adjustment.

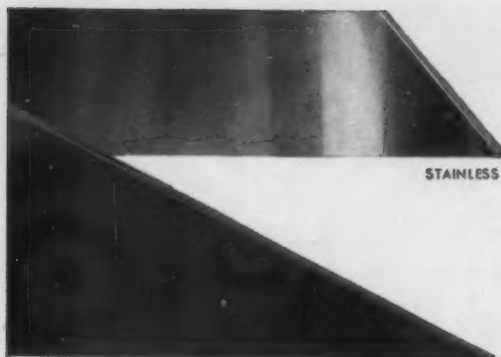


No. 210 "**NO-FLEX**" floor register. Sturdy grid type. Matching **COLD AIR RETURN** is No. 265.



No. 130 — **Tops for gravity or conversion installations.** No. 330 companion sidewall register.

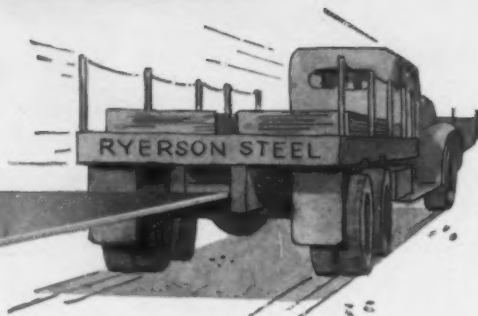
PRODUCERS OF REGISTERS, GRILLES AND DIFFUSERS



STAINLESS

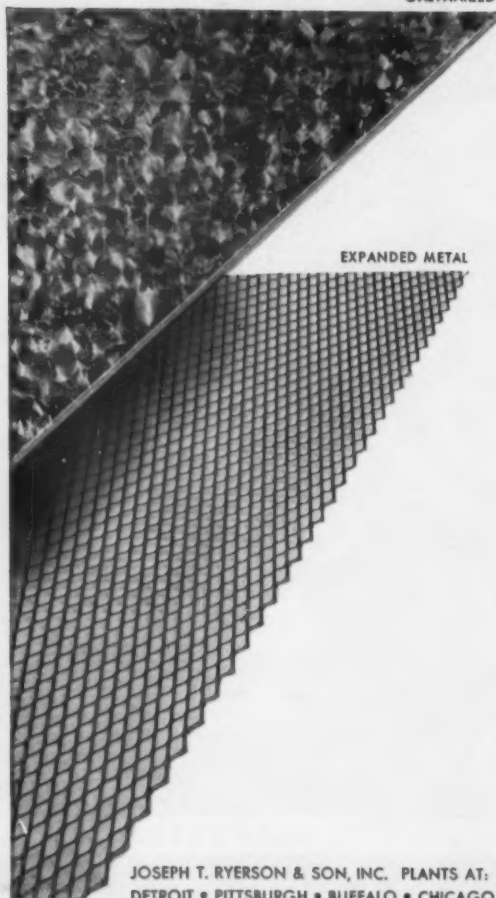
HOT ROLLED

COLD ROLLED



Sheets Quickly

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You get the sheets you need without delay when you call your nearby Ryerson plant. That's because we carry the world's largest stocks—an unusually wide range of gauges and pattern sizes in more than 20 types. Whether you need a single sheet or a truck-load, pattern size or cut-to-order, we can assure you of immediate delivery.

Ryerson galvanized sheets are a special tight-coated type that form readily without peeling or flaking—are bright and clean with uniform spangle. Workable Ryerson stainless is all time-tested Allegheny Metal, with the high quality finish that will please your most particular customers. Ry-Ex Expanded Metal is available in two types, standard and flattened, both types with all sharp edges removed.

MACHINERY AND TOOLS. And when you need metal-working machinery or tools, again you can depend on Ryerson. Your nearby Ryerson plant supplies—and unreservedly guarantees—every type used by sheet metal shops.

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"Dealer Holds Key to Heating, Cooling Sales"

ONE OF THE speakers at an important industry meeting last month pointed out that the movement of a manufacturer's product is determined by the retail dealer. "The manufacturer does not enter into the consumer decision of what product brand he buys," he said, but this decision is determined by the dealer — and not by the marketing practices of either the manufacturer or distributor, although these practices "have a great effect upon the success or failure of the dealer."

In continuing his discussion at the annual convention of the National Warm Air Heating and Air Conditioning Association, Philip C. Kosch — sales manager of Carrier Corp.'s Bryant division — said that manufacturers must therefore "recognize and accept that the key person in the sale of comfort equipment is the retail dealer."

"It is the effective training programs of both the distributor and the manufacturer that contribute to the success of the retail dealer, who holds the key to the door of volume distribution," he continued. Pointing out that the principal interest of the dealer is to operate his business at a profit, Mr. Kosch said it was his firm belief that all manufacturer training programs must have, as their principal objective, "a dealer development phase aimed at making profits for the dealer."

That dealers need help which manufacturers and their distributors can give is obvious from the wide range of responsibilities facing dealers. In addition to product knowledge and mechanical know-how, said Mr. Kosch, dealers are concerned with the recruiting and training of personnel, are involved in financing, in credit sales, in inventory, in purchasing, in book-keeping, in advertising and in sales promotion.

"My hope, if my company decides to use superlatives in its advertising," he concluded, "is that the heading will read: 'We have the most successful and profitable retail dealers in America.' Then and only then will our position in the industry reach our planned goal of leadership."

Mr. Kosch hit the nail right on the head, to our way of thinking, in stressing the dealer's key position in heating and cooling sales. His suggestions for strengthening the dealer's position should be remembered well by all concerned with the full development of our industry.

Modernization—Market for Specialists

Here's a dealer who believes you're either in or out of this profitable — but competitive — field. On that theory he's built an organization that's all the way in, and he's finding all the work he can handle



By Robert F. Welch



A MODERNIZATION PROSPECT calls at California Heating and Air Conditioning Co.'s modern shop and offices which are favorably located in the heart of an older residential district

A VAST AND PROFITABLE market awaits the dealer who knows how to modernize antiquated residential heating systems.

There is more involved than mechanical knowledge. For success in the replacement field a contractor must understand not only costs but also sales psychology.

These things have been worked out to a fine art at California Heating and Air Conditioning Co., Hollywood, Calif. When Dave Mills bought the firm in 1950 the crew numbered 65 installers with a fleet of 27 trucks. It was doing a big volume in new construction, but the profit and loss statement didn't look so healthy. Mr. Mills promptly cut payroll and rolling stock investment to one-fifth its former size, eliminated bidding on tract work and jumped into remodeling with both feet.

Dave Mills was tapping a market which although frequently overlooked is highly competitive among those who do aim at this profitable segment of the field. His energetic cutting of overhead costs as soon as he took over the business points up an important fact which might be borne in mind by any firm interested in remodeling. It is not a high volume, low margin operation. Properly handled, it promises high profits with minimum investment. The company's growth is more limited by the supply of qualified manpower than it is by the market potential.



TYPICAL modernization job in progress is identified with California Heating and Air Conditioning Co. by attractively painted truck parked outside the house while work is being done



When the payroll at California Heating and Air Conditioning Co. was cut from 65 to 10, only the men with the widest experience were retained. They have to be versatile because every remodeling job is different. Employees not only must be capable mechanics but also must possess a certain amount of sales ability and be able to improvise when the occasion demands.

By the same token, the average salesman doesn't usually work out too satisfactorily. It takes special training to learn how to approach prospects for modernization work. Mr. Mills now handles the sales work with the help of two men working on commission. Of the 14 salesmen formerly employed, those who remained with the firm are adept estimators, know how to deal with homeowners, and are thoroughly familiar with residential construction. Not only are they competent engineers, they also know what the installer will find when he cuts the openings in the wall to install supply and return ducts.

Why Enter Modernization Market?

Remodeling is often messy and can pose some knotty problems unless the dealer and his crew really know their business. That's why many dealers shy away from it. Yet at the same time there is an established demand which minimizes the sales problem. A fact worth re-

membering is that even during a boom construction period of over a million houses a year, new homes make up only about 2 percent of the existing housing inventory. To ignore the other 98 percent is to overlook one of the most fertile fields for heating and air conditioning sales.

Nor is there much chance the market will decline. As Mr. Mills points out, one of the main reasons it is so hard to make any money doing new construction work in many parts of the country is that price has become the paramount consideration. Because he's most familiar with what has transpired in southern California, he cites the situation in that area as an example of why dealers can expect a continuing demand for qualified companies to do the required replacement work.

"While it's true the majority of the new houses have forced air systems instead of other types of heating," says Dave Mills, "I have heard that some of these installations are being made for practically the cost of the equipment. The result is that we see some builders advertising lots of square footage and featuring heating systems which are actually undersized. But because the public doesn't know the difference, these builders are able to sell them a bill of goods. A few years from now today's buyers are going to be looking for better heating facilities — just like their predecessors who bought homes 10 or 15 years ago."

Although the company makes a good many forced air installations to replace wall and floor furnaces, not all jobs use the newest types of equipment. There is the family budget to be considered, as well as layout of the home. Frequently it's more advisable to install duct systems which utilize the stud space of inside walls than to install perimeter distribution systems. The slab home is an example.

Financing, Collection Problems Are Few

It is interesting that the firm has no problem with financing. Contrary to what might be assumed, families interested in remodeling usually have enough cash to see them through. In borderline cases, of course, the FHA Title I arrangement which provides \$2500 on a 36 month payoff is always available.

Mr. Mills' business experience has been an asset in avoiding bad debt losses. He and his salesmen shun high pressure tactics. They sit down with the customer and talk things over thoroughly before asking for the order. Besides instilling confidence, this practice gives the salesmen a chance to evaluate the individual's responsibility and ability to pay.

California Heating and Air Conditioning Co. asks for a third of the contract price on completion, another third in 30 days, and the final payment in 60 days. Offering such credit arrangements does run up a certain amount of expense — there is usually about \$10,000 outstanding on the books — but it's a legitimate cost of doing business which is covered by the pricing policy.

Upgrade Prospect's Requirements

Let's examine a typical sale to see how the company's procedure works. Not long ago salesman Everett Zeigler, who is an engineer with 30 years heating experience, talked to a prospective customer in the Beverly Hills area.

The \$50,000 home was 22 years old. It was warmed by wall furnaces in some of the rooms. Other heating men had already talked with the owners and made their recommendations about how the system could be brought up to date.

Mr. Zeigler discussed the problems with the family and sold them a \$1250 job, even though the figure was considerably higher than bids from competitors. He did it by upgrading their requirements — what Dave Mills calls "throwing in everything but the kitchen sink." He convinced the prospects that what they were really after was cold weather comfort rather than a cheap heating system.

Some of the problems required resourcefulness and imagination. For instance, in the job described, all the competitors had insisted that the forced air furnace be placed in a closet off the dining room. Realizing that the housewife hated to forfeit this important storage space, the California Heating salesman recommended a rearrangement of the service area to accommodate the

furnace. That suggestion was enough to clinch the sale.

Again, none of the other heating men had given due consideration to heating the bathroom. Walls were tiled, and they either wanted to leave out a register or place one along the baseboard. Since neither course would be satisfactory in the long run, Mr. Zeigler suggested taking the plaster off the back of a wall and cutting through for a high register. It ran the cost up, but it also insured customer satisfaction.

After the job was sold the salesman prepared a detailed layout and was on the job when the installation crew reported for work. He went over the premises with the men and the owner to make sure everyone understood exactly what was to be done.

Each Step Requires Journeyman's Skill

The crew as usual was comprised of two journeyman mechanics and no helpers. Dave Mills feels it is false economy to hire a helper when every move to be made is important. The workers have to know where to cut in, and must be right the first time. Use of power equipment rather than keyhole saws makes the work go much faster he says.

The crew reports to the job neatly dressed and cleanly shaven. Their truck is clean and attractively painted. Before starting work, they spread dropcloths in all areas where they intend to work.

Large dropcloths are heavy duty canvas and the smaller cloths are a paper similar to the type used by painters. Even sawdust and bits of plaster are collected and trucked back to be dumped at the shop.

If there is not a great deal of plastering, painting or hardwood flooring, the men do it themselves. In other cases subcontractors are called in to do the finishing.

Occasionally crews run into unanticipated difficulties requiring a change in plans. Working in older homes, they may encounter 2 × 3 studs instead of the conventional 4 in. stud used for walls. If examination of wall thickness at a doorway discloses the smaller studs, ducts must be run elsewhere.

Such was the case on one gravity furnace installation several months ago. Plans called for putting equipment in the basement and running ducts up the walls. When the shallower studs made it impossible, the furnace was placed in a closet.

Advertising Hits Public Directly

California Heating finds its most effective advertising approach is John Doe telling Richard Roe about his new furnace. No "cold turkey" calls are made, yet it takes the full time of three men to follow up the leads that come in.

"There's no other phase of the heating business where public good will pays off so well as in the replacement market," Dave Mills says. "And it is really the only place a contractor can establish good will, because here he is dealing directly with the public."

Engineering . . .

Installing . . .

Servicing . . .



Bypass Cooling Coil to Eliminate 'Humidity Bump'

**. . . yet maintain continuous air circulation by
permitting constant blower operation without causing
reevaporation of the condensate**

By S. W. Reid
Air Conditioning Engineer
Gilbert Associates, Inc.

A RECENT ARTICLE in this series (October 1955 American Artisan) proposed three basic classifications for the various relationships the heating and cooling elements of a residential air conditioning system might have to each other. These classifications placed the elements 1) in series; 2) in parallel; 3) at one time in series and at another time in parallel.

Fig. 1 illustrates typical hookups of the latter two classifications which

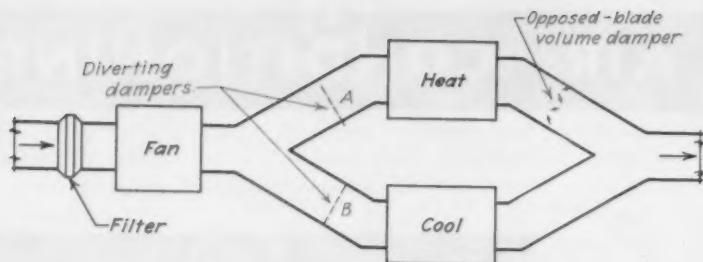
have in common the fact that the cooling coil can be bypassed. In the previous article we assumed this bypass was to be used only during the heating season. In the strictly parallel arrangement bypassing was necessary to get air across the heating element. In the series-parallel arrangement it was suggested that blower operating expense could be reduced in the heating season by using the bypass and reducing blower speed.

This month we shall carry the discussion of the cooling coil bypass further in suggesting how it might be used during the cooling season to improve system performance.

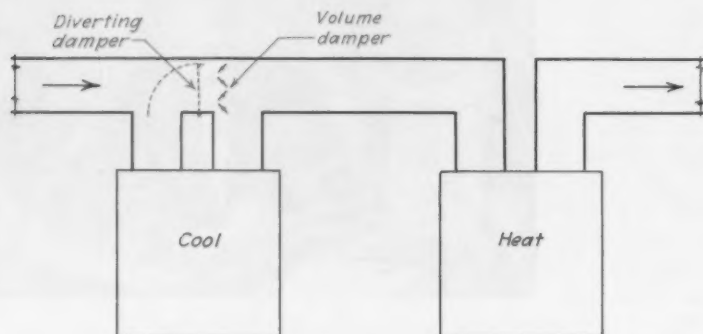
Among the advantages of air con-

ditioning are the control of temperature and humidity. Both are reduced by passing air over a refrigerated surface known as the evaporator or cooling coil. Temperature is dropped because the surface which the air contacts is maintained by the refrigeration system at a temperature less than the air temperature. Because of this temperature difference, heat flows from the air to the coil surface from which it is removed by the refrigerant and carried to the condenser whence it is dissipated either to the atmosphere directly or to cooling water from some source.

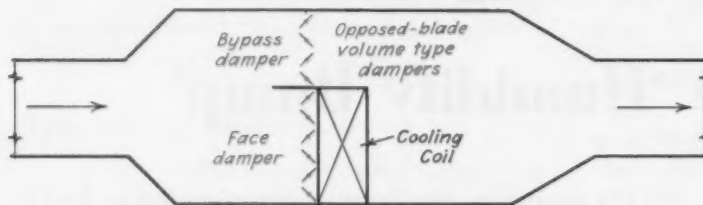
The process of reducing humidity or the moisture content of air is not



1a FURNACE AND cooling coil are in parallel, bypassing is through heating element. When compressor stops, damper "A" opens, damper "B" closes



1b SINGLE DIVERTING DAMPER directs air either through or around the cooling coil



2 TWO VOLUME DAMPERS provide control of humidity when cooling load is light

quite as simple as is the reduction of temperature. A refrigerated surface will not necessarily reduce humidity simultaneously with temperature. To "wring" moisture from the air it is necessary not only that the refrigerated surface be below the dry bulb temperature of the air, but also that the surface temperature is below the dew point temperature of the air-moisture mixture which contacts it. Dew point temperatures may be determined from charts or tables in standard references provided the dry and wet bulb temperatures of the air are known.

A cooling coil which is reducing only the air temperature will operate "dry." One that is reducing both

temperature and humidity simultaneously will operate "wet." In the latter case, the surface is cold enough to cause the invisible water vapor in the air to condense to liquid form. Condensation takes place on all parts of the coil which are colder than the dew point of the air contacting them.

Typical air conditioning coils are constructed of a number of parallel tubes passing through thin sheets of metal called fins. When there is proper tube-fin contact, the fins effectively extend the exterior surface of the tubes and improve the transfer of heat from air to the refrigerant inside the tubes. The outside area of the tubes is known as the primary surface, and the fin area is known as

secondary surface. For one particular coil in a 3 ton packaged unit, there are 13 sq ft of primary surface and 239 sq ft of secondary surface, making a total of 252 sq ft which moisture, condensing from the air, can wet.

Under normal operation water condensed by the coil surface will run down by gravity to the condensate drain pan beneath the coil. There it is collected so that it may be piped away, usually through a trap. At all times while the coil is dehumidifying, the large surface area will be wet and will retain a certain amount of water which "hangs up" and does not drain off. Among the factors which affect the amount of water retained are the fin spacing, the surface characteristics of the metal, the surface tension of water, and the air velocity.

When Is Humidity Affected?

As long as a coil is refrigerated sufficiently to dehumidify, the free water retained by the coil surface in no way affects the psychrometric properties of the air passing through the coil. The only effect it does have is to reduce the passageways through the fins which are available to the air thereby increasing the resistance pressure of the coil. (At 350 fpm face velocity, a typical 12 fin per in., 3 row deep coil under dry operation has a resistance of 0.12 in. water whereas under wet operation the same coil would have a resistance of 0.18 in. water.)

When air continues to flow through a wet coil after refrigeration has ceased, the water hung up in the coil does have a positive effect on the psychrometric properties of the air since it will reevaporate and raise the humidity. Not only is the water on the fins subject to reevaporation under the above conditions but so also is any free water lying in a poorly drained condensate pan which is in the path of the air stream through the conditioner.

Operating Sequence Traced

Keeping the above disclosures in mind let us now apply them to the

operation of a residential cooling system. Such a system usually is automatically controlled by a thermostat which we shall assume for this example has a 2 deg differential and is set for a control point of 80 F. The operating sequence would be as follows:

1) When the space temperature rises to 81 F the compressor starts and refrigerates the cooling coil. Since the coil surface temperature is maintained below the dew point of the air entering the coil, both sensible heat and moisture are removed.

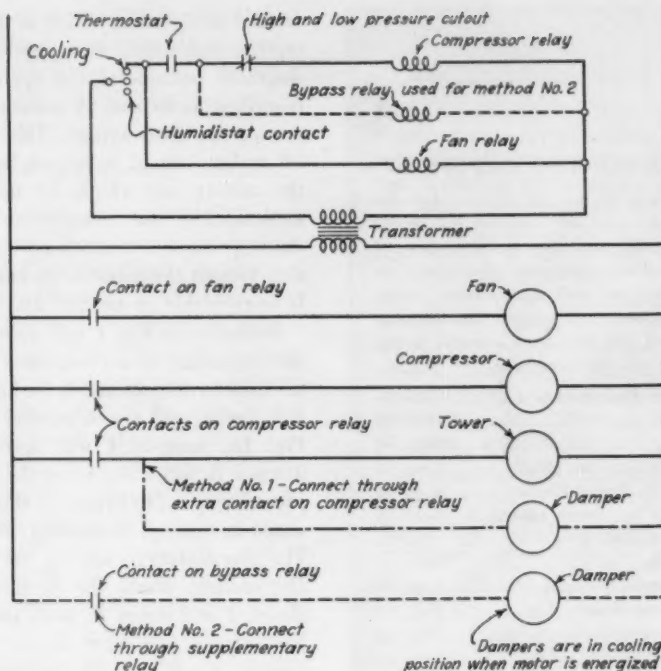
2) When the space temperature has been reduced to 79 F the thermostat is satisfied. Its contacts open and the compressor stops.

a) If the blower stops simultaneously with the compressor, there will be a gradual rise in space temperature — and humidity — until the thermostat again starts the compressor.

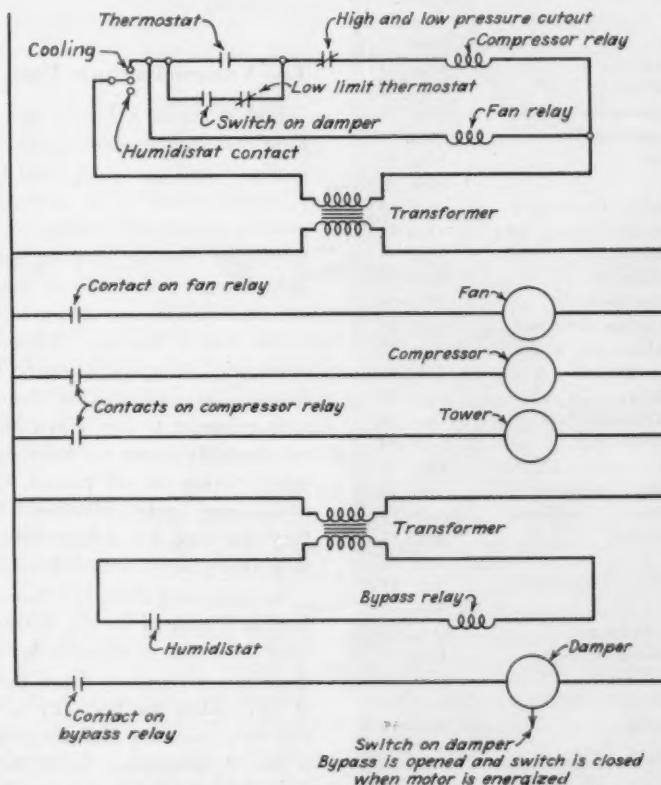
b) If the blower operates continuously, there will still be only a gradual rise in space temperature. There will however, be a rapid rise in the humidity as the air passing over the wet coil — which is not, during this interval, being refrigerated — reevaporates moisture and carries it back to the conditioned space.

When the blower stops at the same time as the compressor (see 2a above) the "humidity bump" which occurs with continuous blower operation (2b) is avoided. Stopping the blower however, has several disadvantages. One is that on-off blower operation makes one more conscious of minor noises and drafts that might otherwise go unnoticed. Another disadvantage is the loss of the freshening effect which circulating air gives the conditioned space. A third disadvantage is loss of the flywheel effect which circulating air provides. Air circulation has a tendency to maintain more even temperatures throughout the space, working against stratification and rapid temperature rise in localized areas.

At first glance it would seem that we have an application of the old saying, "You can't have your cake and eat it too." However, there is a third



3 WIRING DIAGRAM suggests two possibilities for hooking up spring return damper motor which returns dampers to heating position when compressor is not in operation



4 FACE AND BYPASS dampers control humidity. Space thermostat controls compressor; when humidity climbs to a predetermined point, humidistat partially opens bypass and partially closes face dampers to reduce air passing through the cooling coil

A CONTINUING SERIES

... of articles written for the residential air conditioning dealer points out the fundamentals of cooling equipment operation, application and maintenance. Management and engineering information has also been covered in the 40 articles listed here.

Air Distribution	Jan. 53
	Dec. 53
	Sept. 55
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method of operation which is the exception and which does provide the desirable features of the operations described as 2a and 2b without presenting the disadvantages. This method makes use of a bypass around the cooling coil which, by opening automatically on compressor shut down, permits continuous air circulation without the moisture pickup that is unavoidable in method 2b.

Reference to Fig. 1 will show how the bypassing is accomplished with the basic arrangements. If the furnace and cooling coil are in parallel as in Fig. 1a, damper A will open and damper B will close when the compressor stops. The bypass in this case would be through the heating element. The thermostat, in sensing the need for cooling, starts the compressor, closes A and opens B. With the bypass closed, air once again flows through the coil. With the arrangement in Fig. 1b a single diverting damper is all that is necessary to direct air either through or around the cooling coil.

Two Volume Dampers Used

Fig. 2 shows a bypass arrangement that has the advantages of those in Fig. 1 and also lends itself to applications where it is necessary to provide control of humidity on days when the sensible cooling load is light. Two volume control dampers are needed. The one shown in front of the coil is the face damper, the other is the bypass damper. These dampers are operated as described with reference to Fig. 1 to eliminate the humidity bump normally experienced during the off portion of the compressor cycle. However, when they are used for dehumidification, they are operated with a humidistat.

As mentioned above, the dehumidification feature of the Fig. 2 arrangement is useful in climates in which there are a relatively large number of days when the humidity is high and the outside dry bulb temperature is low. A compressor under thermostat control would not normally operate under such conditions since the thermostat would be satisfied. If the compressor were controlled by a

humidistat, it would operate to satisfy the setting, but it would be necessary to provide heat to the air so the space would not become overcooled. While this method provides good humidity control, it is often too costly for residential use.

Bypassed Air Is Tempered

The bypass arrangement in Fig. 2 allows up to 50 percent of the circulated air to bypass the cooling coil. This condition has two effects. First, the reduced flow of air through the coil causes a rebalance of the refrigeration system at a lower compressor suction pressure and correspondingly reduced capacity. Second, air which is cooled will leave the coil at a lower-than-normal dew point temperature and correspondingly low moisture content. The cool air is mixed with the bypassed air to reach a supply air temperature which in most cases will not overcool the space.

Fig. 3 shows the wiring for a typical system where the thermostat and selector switch are low voltage, where the blower operates continuously and where the compressor is controlled by a contactor operated by the thermostat. Two possibilities are shown for hooking up the damper motor. The first makes use of an extra switch on the compressor motor contactor, if such a switch has been provided. The second method requires an extra relay operated by the thermostat as shown. In either case, a spring return damper motor would be used. It would be linked to the bypass arrangement in such a way that when it is energized during periods of compressor operation the dampers would be in the cooling position. When the motor is deenergized during periods when the compressor is not operating, the spring would return it to the heating position. Thus, the dampers would also be in proper position for heating when the seasonal selector switch is moved to the heating position.

Fig. 4 is a control scheme for the arrangement in Fig. 2 which uses face and bypass dampers to control humidity. The space thermostat is used to control the compressor. The

system will operate with full cooling capacity and with no bypassing when the dry bulb setting of the thermostat is not satisfied. The humidistat is set for a humidity slightly above that which is normally maintained when the compressor is being cycled by the thermostat.

The humidistat takes control when the thermostat is satisfied, but the space humidity climbs to the humidistat setting. When this condition occurs, the instrument partially opens the bypass and partially closes the face dampers so as to reduce the amount of air passing through the coil. When the damper motor reaches the end of its travel, it trips an end switch and starts the compressor even though the thermostat is not calling for cooling. Compressor operation continues until: 1) the humidistat is satisfied, 2) it is stopped by a low limit space thermostat, if one is used, or 3) it is stopped by the low temperature or pressure safety control which will prevent the coil from frosting.

If the scheme shown on Figs. 2 and 4 were used, it would not be necessary to provide for coil bypassing whenever the compressor stopped since the humidistat would sense any

increase in humidity due to reevaporation and would set up the action described above to correct the situation.

Volume or Diverting Dampers?

Two types of dampers have been discussed. These are labeled in Figs. 1 and 2 as diverting dampers and volume dampers. The former may be of the single leaf type with a hinge at one end. This type damper is used in one of two extreme positions, either fully opened or fully closed. It should have strips of felt or rubber cemented to the blade edges and ends so that when it is closed, air leakage will be very small.

The volume damper is used to regulate the flow of air. It is usually set in some position intermediate to full open or full closed. In Fig. 1a it would be set during the cooling cycle so that the same amount of air would flow through either path. For winter it could be opened to make possible a power saving through fan speed adjustment or it could be set to obtain the most desirable air flow for heating.

In Fig. 1b the volume damper is necessary to add resistance to the

What Is 'Air Conditioning'?

The American Society of Heating and Air-Conditioning Engineers defines air conditioning as follows:

"The simultaneous control of all, or at least the first three, of the following factors affecting both the physical and chemical conditions of the atmosphere within a structure: temperature, humidity, motion, distribution, pressure, dust, bacteria, odors, toxic gases, and ionization."

Reference: Heating, Ventilating, Air Conditioning Guide 1955, page 1. Published by the American Society of Heating and Air-Conditioning Engineers, New York.

bypass to maintain constant flow when the air is not passing through the cooling coil. It would also be used for adjustment as described above.

The opposed blade type of volume dampers give streamlined flow, minimize turbulence, permit air to move in the same direction for all damper positions and provide a true gradual control of air volume.

Pre-Pouring Care Reduces Chance of 'Under Slab Reservoir'

THE VALUE OF GOOD site preparation and grading for concrete slab floors is pointed out in the Building Research Advisory Board's report, *Slab on Ground Construction for Residences*. This manual is the result of numerous studies made by National Academy of Sciences-National Research Council, Washington, D.C. In the section devoted to slab flooring it says, "The value of either a gravel base or a vapor barrier as a means of moisture protection is likely to be destroyed if the ground adjacent to the slab is not properly graded and drained. Where good drainage practices are not followed, the earth beneath the slab becomes a reservoir for water."

Finish grades should slope downward away from the structure a minimum of 12 in. for a distance of 25 ft in all directions (4 percent slope). Where property lines, retaining walls, etc., limit the distance from the structure to less than 25 ft, no less than a four percent slope should be provided.

Wherever less than a four percent slope is used adjacent to the structure, such as for a terrace, a positive

means of drainage should be provided.

In hillside locations, the site should be so graded that surface water will be diverted around the structure. In addition, a positive system of underground drainage may be required for certain conditions.

Where warm air ducts are used in or under the slab, the finish grade at the outside wall should be not less than 2 in. below the bottom of the ductwork adjacent to the foundation wall. Duct deterioration will result in an excessive humidity condition.

Vapor barrier joints should be lapped a minimum of 6 in. Sealing is not required. Vapor barriers should be capable of withstanding handling and construction traffic without puncture or displacement.

The durability of vapor barrier materials used should be at least equal to smooth surface roll roofing material weighing at least 55 lb per 100 sq ft. or polyethylene at least 4 mils thick if moisture migration into the building is to be avoided.



REGISTRATIONS WERE BRISK and heavy as attendance records were set. Many eastern dealers attended NWAHACA convention for the first time

As NWAHACA Sees It —

This is the Year for Profit

Favorable market predictions, new technical advances, profitable business suggestions and increasing recognition of the value of trade associations point to a bigger and better market this year, according to speakers and members at the association's two day meeting. Here's what they said, in capsule form

IT WAS DEFINITELY a dealer's program put on by the National Warm Air Heating and Air Conditioning Association at its 42nd annual convention in New York City November 30 and December 1. Among the many subjects covered were the market potential for 1956; how to obtain a fair share of the market, in both residential and non-residential warm air heating; new technical information uncovered at the research center of the University of Illinois and from the mobile laboratory; how to operate a service department at a profit; value of local dealer associations and what the

market picture for 1956 looks like.

Reelected for second terms were G. W. Denges, president; F. L. Meyer, first vice president; and Tom Byrd, second vice president. George Boeddener was reelected secretary-treasurer. New trustees elected for two years are W. J. Olsen, David E. Sedgwick, G. D. Heeringa and Walter C. Kremser. Reelected for an additional term of two years are J. F. Deane, S. J. Levine, E. A. Eichenberger and C. L. Sapp. Remaining on the board of trustees for one year are J. F. Knoff, T. W. McNeill, F. J. Nunlist, Jr. and C. J. Pearson. C. B. Phillips remains as ex-officio.

Highlights of the convention are capsuled here for your convenience. Complete papers presented during the two day meeting are scheduled to appear in subsequent issues.

G. W. Denges, president of NWAHACA and vice president, the Williamson Co.:

1 Cumulative reports show that 1,300,000 furnaces were produced during 1955.

2 Early tabulations indicate 125,000 central residential cooling units installed during 1955.



TO GUIDE NWAHACA during 1956 are (from left) F. L. Meyer, first vice president; G. W. Denges, president; Tom Byrd, second vice president; and George Boeddener, secretary-treasurer



RESEARCH AT the University of Illinois is discussed by research staff (from left): S. Konzo, J. R. Wright and D. R. Bahnfleth

3 The development of the perimeter system of warm air distribution has resulted in the sale of approximately 1,000,000 additional furnaces to builders of slab and crawl space houses since 1950.

4 Approximately 150 houses have been tested by the mobile laboratory crews since 1950.

5 CAC has been used to represent the words "continuous air circulation." The new meaning for this term is "comfort air circulation." See new edition of Manual 6.

6 In 1940, 25 percent of the furnaces sold were forced air. In 1955, 90 percent were forced air. It is expected that 95 percent of those sold in 1956 will be forced warm air.

7 Results of investigations in central residential air conditioning at the Austin, Tex. research village have resulted in the acceptance of Manual 11 as the standard for installation specifications by federal, state and local authorities.

8 A new section on designing summer cooling equipment for structures where the heat gain does not exceed 325,000 Btu is being added to Manual 9.

9 Over 100,000 copies of the association's 11 manuals were sold during 1955.

10 More than 18,000 persons have attended the indoor comfort conferences during the past eight years.

11 A special mailing of Manual 9 to all members of the American Institute of Architects has brought to their attention the warm air way of heating structures with heat losses up to 350,000 Btu.

12 Increased publicity by the association at the consumer level is scheduled for 1956.

13 Late in 1956 a new consumer booklet will be released to replace the current consumer piece now used, entitled Seven Steps to Indoor Comfort.

14 Opportunities in central year 'round air conditioning are brighter for 1956 than in any previous year.

15 Aggressive local programs during 1956 are needed to channel consumer dollars into the year 'round air conditioning industry rather than into competitive industries.

L. C. Wheatley, president, Canadian Chapter NWAHACA:

16 Canadian market is growing rapidly, population has increased to 16 million (two million over 1950 census figure).

17 Over 1000 Canadian heating dealers and their employees attended five day warm air heating schools in 1955.

18 Fifteen warm air schools were scheduled throughout Canada during 1956.

19 Canadian market in 1955 was 125,000 furnaces.

L. S. Redford, vice president, Jackson and Church:

20 Non-residential warm air heating market is rapidly expanding and presents a promising future to dealer-contractors featuring this phase of the field. Estimates for 1956 indicate the dollar volume to be spent for manufacturing facilities will increase 9 percent over the 1955 volume. Similarly, public works dollar volume is expected to be 13 percent greater in 1956.

21 Heating a large church with a warm air system resulted in a saving of \$13,000 over any other



PANEL REHEARSAL GIVES (L to r.) Martin Schaar, R. V. Main, James H. Winters and R. P. Johnson a chance to talk over the information to be presented so duplication is avoided



TALKING OVER dealer problems are (from left) Bernard Lawrence, Clarence Grandstaff, Guy Voorhees and James H. Welch

type of heating system that could have been installed.

22 A block of stores forming a shopping center used warm air heating systems with a resultant saving of 40 percent over other forms of heating specified in bids.

23 Tempering outside air for a foundry ventilation system with direct fired duct heaters eliminated objectionable drafts and improved production output 10 percent.

24 "Saved floor space in industrial application of warm air heating systems by using suspended furnaces and prefabricated chimneys," said one engineer.

C. A. Bowser, assistant commissioner, FHA:

25 Time at FHA offices can be saved by becoming acquainted with form No. 2005, entitled Description of Materials, Heating and Air Conditioning.

26 FHA rates local builders by their performance record. Higher commitments go to best builders, resulting in quicker sales because down payments are lower. Tie in with the better builders to assure prompt, full payment for your services.

27 FHA office personnel need an educational program. Dealers can gain local prestige and FHA

confidence by contributing their services to programs of this nature.

28 By keeping local FHA officers informed of changes in trade practices, the alert dealer can obtain quicker approval of his heating and air conditioning plans.

W. H. Bowe, Jr., past president, National Heating and Airconditioning Wholesalers:

29 Prevent a "profitless prosperity" by cooperating with your wholesaler and manufacturers' representative.

30 Each segment of the industry has a voice in its success or failure. Make your problems known so that all parties can work toward their solution.

K. L. Wilson, manager, Heating Controls Div., Minneapolis-Honeywell Regulator Co.:

31 We keep trying to peer into the future, partly out of curiosity and partly out of necessity. The necessity of trying to look ahead is more urgent today than ever before.

32 In a recent market survey as to what the public thought about heating and residential air conditioning for 1965, some said:

"I'd say that 95 percent of the homes will have year 'round air conditioning."

"I've heard about the heat

pump and like what it has to offer."

"Maybe I'll have an atomic or electric furnace in my home."

"I've heard reports about solar heating; perhaps that will be common in 1965."

33 Architects expect the heating and air conditioning industry to come up with concepts and equipment that will make comfort more of a reality in the house designed for 1965.

34 The big problem for dealers is how to do a professional job and still compete in the face of severe price cutting.

35 The biggest sore spot in the industry today and one that will become more serious in the future is the type of competitive bidding on jobs that really means indiscriminate price slashing.

36 We hear little or nothing about how to get the American people to spend money for residential air conditioning instead of for kitchens, color television or new gadgets for cars.

37 The success of any company will depend on its ability to merchandise.

38 Manufacturers are always looking for dealers who are in sound financial condition and willing

to promote aggressively their products at the local level.

39 Manufacturers have the responsibility of providing merchandising and training aids to the dealer and wholesaler.

40 A housing boom in 1965 will be much larger than any we've seen before.

41 It is logical to believe that home owners in 1965 will demand much more in the way of home comfort than do home owners of to-

day. It can mean that the public attitude toward comfort — and the comfort generating industry — will be more favorable 10 years from now than ever before.

H. C. Gurney, sales manager, Janitrol Heating and Air Conditioning Div., Surface Combustion Corp.:

42 The prices of automobiles and new homes have tripled since 1940 while the price of the furnace has increased only 25 percent and the price of a complete warm air heating system has gone up only 12 percent during the same period.

43 Between 75 and 80 percent of the centrally heated homes built in 1955 were heated with warm air systems.

44 The annual dollar volume for the warm air heating industry was \$250,000,000 during 1955.

45 Continue to educate the public as to what a first class heating system consists of and the profit level will follow.

46 The term "an industry approach" can be an overall ef-

what the dealers said:



Walter Marth I came to the convention to get some new ideas that I can use in my business. I've found that this convention has provided information that I'll be able to pass along to other members of my company. We want to continue to grow with the industry, and learning the right way to do a job is the best way to enjoy a healthy business growth.

F. Van Pils The time and expenses involved in attending a convention of this type are well spent. The people you meet and talk with always leave behind some good idea for improving the operation of your business. There are a number of good ways to obtain up-to-date information — the trade publications, industry schools and conventions — they all contribute to widening a dealer's perspective. I intend to put them into use when I return to Lockport.

Robert S. Schmieder Associations reflect the interest of the membership and everyone attending this convention indicates that this association is doing a fine job. The information given by the speakers and the personal contacts I've made have proven to me the value of membership in an association — local, state and national. We are proud to display the association's symbols on our letterhead; it signifies to the public that we support the work being done to advance our industry.

Eugene Droegkamp The research program conducted by the association and reported at this convention is the greatest continuing contribution to the comfort of mankind. I feel that the exchange of ideas with other contractors has widened my points of view and will aid me in conducting my business when I return home to Milwaukee.

fort by all segments of the industry to whip its evils through education at consumer, dealer and wholesaler levels.

47 There are no poor heating systems installed today because of a lack of available "know-how," it's the failure to use what we know.

P. C. Kosch, sales manager, Bryant Div., Carrier Corp.:

48 The movement of a manufacturer's product is basically in the hands of his retail dealer. Of course the attitude of the manufacturer and his distributor have a great effect on the success or failure of the dealer.

49 Sales training represents the philosophy of a business concern's selling practices.

50 Do not wait until the home owner realizes that it is time to replace an outdated heating system. Sell along the same lines as the automotive industry, which emphasizes the obsolescence of old equipment in its sales approach.

51 Locate prospects by developing a source of motivation that will bring the public to your display room.

52 Check your bank account. If there wasn't more money in it at the end of the year than on January 1, 1955, then the year was not a profitable one. Next check your books and find out why.

R. F. Swett, warm air heating dealer, Springfield, Mass.:

53 Most heating companies actually show a financial loss for their service department, but because of that service department, their overall profits stand a chance of being greater.

54 To make a quality installation, provide a properly balanced and adjusted system, and follow up with good service, it is not possible to be the lowest bidder.

55 The prime advantage a dealer with a service department has to offer is his accurate understanding of the equipment he has installed.

56 In many companies where the effectiveness of individual departments are compared at the end of the year, the service department is frequently blamed for pulling down the net profit. Decreasing personnel, eliminating records or subletting the service work is not the answer.

57 Operate the service department with as few frills as possible. The important things to watch are the quality of the work, quantity performed by each service man, the number of callbacks per man per day, and compactness of the records.

58 A good practice that helps reduce service calls on new jobs is scheduling an inspection call after the first two months of use and at the end of six months.

59 A minimum of twenty dollars should be set aside from each installation for a service reserve.

60 Clean service men are a company asset. Fresh uniforms should be supplied twice a week.

61 A good public relations job can be done by answering "no heat" calls within 30 minutes. A pleased customer is the best kind of advertising.

62 Service men are in an excellent position to uncover the best leads for summer cooling equipment.

63 My company uses a four page brochure to tell new customers what to expect from their heating system and how we can help maintain comfort the year around. This piece of literature not only aids our service department but the sales department too.

Robert P. Johnsen, warm air heating dealer, Chicago:

64 Meetings of the NWAHACA and the Sheet Metal Contrac-

tors' National Association have proven that problems of dealers and contractors in various sections of the country are pretty much the same, differing only in details of their solutions depending on local area practices.

65 Becoming acquainted with other dealers and contractors through membership in a local association has proved that all members of the same industry are faced with common problems and soon share their burdens with you and will give their assistance with your problems in return.

66 A local association that breaks down its objectives and assigns their solutions to committees finds that less time is lost in reaching a solution favorable to all members.

67 The Chicago association prepared a new warm air heating code that was accepted by the city officials and is hailed as a model for the industry to adopt.

68 Failure of a Chicago association member to comply with recommendations made by the grievance committee to correct an unsatisfactory job can result in loss of his membership in the association.

69 "Certified or Registered Air Conditioning System" is a program designed to assure complete satisfaction to every purchaser of a warm air heating or central cooling system installed by members of the local association.

70 The success of a local association depends upon the services of a paid secretary.

Martin Schaar, warm air heating dealer, Milwaukee:

71 Cooperative advertising by members of local associations results in more prestige for the individual and the industry.

72 Local association membership makes it possible to exchange

ideas with other dealers and find ways to deal with general contractors who specialize in bid shopping.

73 Apprentice training — the lifeblood of reliable manpower — is possible only when there is a definite program supervised by the contractors who must hire and pay the graduate journeyman.

James H. Winters, warm air heating dealer, Nashville.

74 Promotion of off-season buying of a heating or cooling system can best be accomplished when it is connected with a move sponsored by a known organization. The connected prestige adds to public acceptance.

75 City governments can be influenced to uphold installation requirements when dealers, through their local association, insist that below-standard installations be modified to meet health and safety codes.

76 A local association is as effective as the effort exerted and the financial backing provided by its membership. Nashville dealers pay dues at a rate equal to 2 percent of the selling price of each job installed. Chicago members pay a sliding scale based upon the number of productive employees — \$50 monthly for nine journeymen, \$75 monthly for 10 to 25 journeymen, and \$100 for over

25 men. Milwaukee members pay 1½ cents per hour of productive labor.

R. V. Main, Viking Air Conditioning Div., National-U. S. Radiator Corp.:

77 As goes the dealer-contractor of this country so goes the industry.

D. R. Babnsfletb, research associate, University of Illinois:

78 Recent tests at the University of Illinois research laboratory indicate that readjustment of the blower to achieve air volumes required for summer and winter is necessary in fall and spring.

79 Investigations into pressure losses in perimeter fittings and diffusers reveal that air velocity as well as size of the duct affect the air volume delivered.

J. F. Wright, research assistant, University of Illinois:

80 Night cooling of a residence resulted in about one-third saving when compared with 24 hour operation cost of a cooling system. However, all outside openings had to be closed by daylight.

81 Humidity regain is one big objection to night cooling techniques.

C. W. Nessell, account executive, Minneapolis-Honeywell Regulator Co.:

82 It's impossible to install a low cost heating system in a multi-level home.

83 Supply and return ducts in multi-level houses require expert engineering.

84 Objectionable drafts down stair wells — even the short ones — predominate among complaints from owners of multi-level houses.

85 The best solution to heating multi-level houses has been found to be the zone control system of air distribution.

Nine college short courses have been scheduled for 1956: January 16-19, Mississippi State college; February 20-23, Oklahoma A & M college; March 7-10, Purdue university; March 28-30, Penn State university; April 2-5, Michigan State university; April 4-6, Syracuse university; April 9-12, North Dakota State college; April 16-19, Iowa State college; April 23-26, Long Island T & A institute, University of New York state.

Twenty-one two day indoor comfort conferences conducted by Guy Voorhees have been planned for 1956. See the news section, WHAT'S HAPPENING, in the front of this issue.

Noise Control to be Studied by ASHAE

A NEW STUDY of noise from air conditioning equipment and installations will be started this fall by the Research Laboratory of the American Society of Heating and Air-Conditioning Engineers. The immediate objective of this project is the development of a basic method of sound measurement which can be adapted so that noise control can be organized on an engineering basis. The need for this sound "yardstick" has been apparent to acoustics experts and air conditioning engineers for several years, according to Elmer R. Kaiser, ASHAE Director of Research.

"All measurements of noise level should be on a comparable basis," said Mr. Kaiser. "Furthermore, the noise level scale should be related to loudness as noted by the human ear. Decibel readings alone are inadequate because they indicate only sound pressure. Loudness is also a function of sound frequency or pitch. A practical measuring technique must combine the sound energies produced at different frequencies. A complication calling for a number of combinations on, say, a fan is the variation in noise emission in different directions."

These comments follow very closely those expressed by S. Konzo in

his series of articles appearing each month in *American Artisan*. See November 1955 *Ear for Noise Starts Sound Control in Heating System*.

The technical Advisory Committee on Sound and Vibration Control of the American Society of Heating and Air-Conditioning Engineers is under the chairmanship of Harold A. Lockhart. This committee has carefully assembled and screened numerous technical suggestions in organizing the program. In addition to the measuring technique, the program seeks to determine the attenuation of sound in ducts, and the regeneration of noise by turbulence in duct fittings and dampers.



This is another in a regularly - scheduled group of articles appearing in American Artisan under the general heading "‘TRAINING PROGRAM’ . . . IN PRINT." These articles are especially prepared to help dealers in developing "know-how" in all aspects of their organizations. Previous articles have dealt with electrical circuits and power factor as they affect the dealer's air conditioning installations, and with a phase of business management emphasizing close control over all segments of the dealer's business. This month we turn to another management idea which is aimed at obtaining the best possible operating conditions.

Look Ahead . . . and Plan for Profit

Here's how one dealer's operational checks, improved techniques, space planning and smooth employee-management relationships make room for the growth which is inevitable under this organized system

FOR A BUSINESS to function properly, it must be organized. And organization usually requires adequate room for everyone to perform his assignments efficiently. This is the belief of the management staff of Shaker Tinning and Heating Co., Cleveland, O., and that's why the third extension is being added to the company's present location. Starting in 1924, Charles Mintz set up a sheet metal business and built a reputation for quality workmanship. As his two sons, Alvin and Julius, grew up they spent many hours in the shop learning the business. When forced warm air heating began to receive acceptance from residential builders, it was found that the 20 × 40 ft shop was too small and the company moved to its present location, where an existing two story building, 40 × 60 ft, was purchased.

Expansion Marks Progress

The growth of the company plus the need for more room to accommodate additional sheet metal machinery made it necessary to enlarge the shop with a 45 × 85 ft, one story addition. Early in 1952, the recognized summer cooling potential prompted the company's decision to add this service to its list. The addition of cooling equipment and the staff to install it called for another expansion of the shop — this time the annex was 81 × 60 ft.

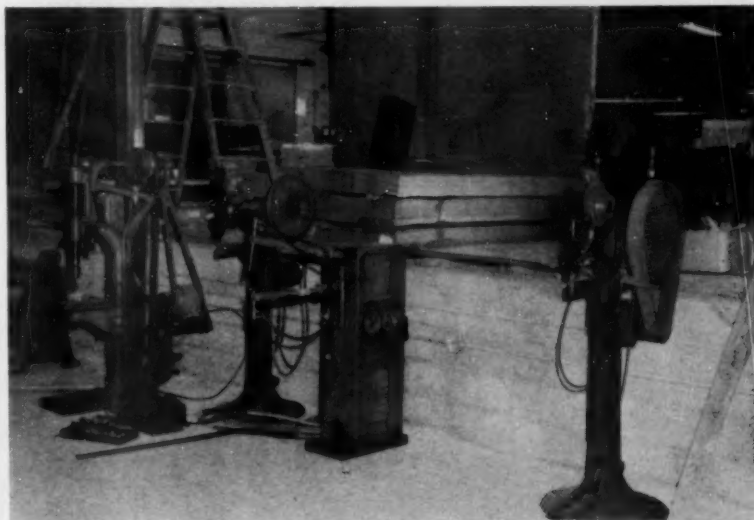
The new addition is 16 ft high and has an open second floor running along the entire 81 ft back wall. The second floor is used for storage of fittings, duct sections, registers, conductor pipe and many other space consuming stock items. The method of storing the stock on this open front second floor level permits loading directly onto a truck leaving



HIGH CEILING permits loading of small parts directly on the delivery truck from additional storage space created by balcony along the rear wall



SPACE TO WORK is the theme and the theory behind the layout used in equipping this shop



BANKS OF AUTOMATIC and power tools are arranged to provide plenty of working room



for the job site and makes it possible to unload returned or new stock directly into the proper storage space.

Shop Procedure Streamlined

Another time saving procedure that not only speeds up the unloading of heavy bundles of sheet metal but also does it easier and safer is the concrete platform which is level with the floor of the sheet metal shop and also at the same height as the tailgate of a tractor-hauled trailer truck. To speed up the unloading of the bundles of sheet metal an electric hoist has been rigged to a monorail trolley which can travel the entire 60 ft length of the concrete platform. This hoist makes it possible to unload a trailer of sheets in 20 minutes, where-

as before it usually required four hours.

Furnaces and air conditioning equipment are stored along the 40 ft south wall together with completed shop work ready to be delivered to the job. All heavy equipment is moved from its storage place to the delivery trucks by hand trucks and set upon hydraulic lift gates mounted on the rear of each truck. Every effort is exerted to make all work easy and safe to handle.

For the ceiling of the new annex, aluminum covered bats of insulation serve a dual purpose — insulation and reflection of interior lighting back to the working area. Space for a well equipped engineering office (8 × 16 ft) is provided on the second floor.

Authority Is Delegated

The planning that went into building the annex is an example of the organizational chart used by the company. Active management has been

turned over to sons Alvin and Julius. It has always been Mr. Mintz' contention that authority must be delegated. In this way it is possible for decisions to be reached without his having to be consulted on anything but the basic operational policies.

The policy of delegating authority is carried on down the management staff of two superintendents, a shop foreman, the service manager, office manager and engineer. Each supervisor knows the extent of his authority because it is clearly defined through previous experiences and by management decisions. Each supervisor knows when and what part of any job comes under his responsibility. Each of the sheet metal journeymen, apprentices and servicemen knows his work and in what manner his co-workers' responsibility parallels his own. Proper delegation of responsibility has eliminated misunderstandings and makes for faster completion of the jobs with resultant savings.

The use of automatic tools is fa-



EXAMINING job prints for specifications prior to writing the proposal are Julius (left) and Alvin Mintz

Shows How It's Done

vored by both shop workmen and management because the uniformity of parts turned out assures quality installations. Many of the power tools used perform multiple operations. One of the most versatile is the caster mounted four position edging and beading machine that is pulled around the shop to the most convenient location for the sheet-metal worker handling the fittings being fabricated and then pushed back in its out-of-the-way storage space along the wall.

Other machines have their specific locations; each piece of equipment is surrounded by adequate working room. The accompanying illustrations show some of the types of machines used — punches, drills, welders, roll formers and other equipment — and their proximity to each other. (In the photo on page 103, part of the sheet storage and unloading platform is visible in the background.)

Checking Improves Techniques

Company management does not limit its efforts to improving production in the shop and on the job. It also keeps a watchful eye on the business side of the operation. An office manager keeps track of all equipment used, orders replacement parts and supplies, and keeps a record of the progress being made on each job.

At the end of each job a check is made against the costs involved and how they compare with the estimate. Constant checking helps keep bids in line with changing costs and takes advantage of economies made possible by improved shop techniques and installation practices.

The growth of the company has caused some pains in finding the right type of people to fit the specific jobs created. One of the solutions has been in developing the personnel needed through the company's own training program. In addition to conducting its own apprenticeship program for sheet metal, heating and cooling men, the company develops its own sales and engineering staff. An example of the development of the engineering department demonstrates the foresight used to produce the type of men to fit the job the company management expects to fill at a certain time. The prospective engineer is a local university student who has fitted his working hours around those of his school curriculum. Thus, vocational training parallels his technical training.

To encourage employees to remain



PORTABLE TOOLS such as this edging table save considerable shop time because they can be moved quickly to the most convenient working area

with the company, management has provided, in addition to the usual fringe benefits accorded all union employees in the Cleveland area, a life and accident insurance policy that protects the worker during the time he is off the job.

These expenses are sizable considering that the company has 45 employees on the payroll but the low turnover in personnel more than offsets the cost of training and employee benefits, according to Alvin Mintz.

Advertising Tailored to Need

Business volume is maintained by a well planned public relations and advertising program. Citywide advertising is used in one daily newspaper. Ads are placed according to relationship of the volume of work on hand and the quantity required to keep the staff operating effectively. The size and frequency of the ad vary with the volume being solicited. The company's display at the city's annual home and flower show has proved very worthwhile in obtaining leads which have resulted in increased sales each year.

It's the company's philosophy to provide the tools to work with and to give the people who do the work a chance to demonstrate their individual abilities, and by so doing all have benefited.

WHAT'S YOUR PROBLEM?

The American Artisan's 'TRAINING PROGRAM' — IN PRINT will explain the whys and wherefores of some of the dealer's problems, tell what to do about them. You will want the members of your organization to study these articles carefully, keep them for future reference . . . If you have a problem you'd like to see covered, write Clyde M. Barnes, Editor, American Artisan, 6 N. Michigan Ave., Chicago 2, Ill.



OFFICERS AND THEIR WIVES relax at the annual banquet after concluding the most successful convention held to date



GETTING ACQUAINTED at an early reception are: (l. to r.) seated, C. H. Wade, Mrs. R. G. Daskowski, Richard J. Young, Mrs. A. L. Thys, Art Thys, Tommy Thompson and F. C. Baumbach. Standing (l. to r.) are Oscar Mutz, Gaylord Randall, R. G. Daskowski and Randy China

Wholesalers See Need to

Step Up Industry Education

. . . from management on down, in every phase of industry operations. This report on the fall meeting of National Heating and Airconditioning Wholesalers Association brings out some sound plans for developing more know-how in the trade

THE THEME, "A Dedication to Education" dominated the three day program at the Ninth Annual Fall Meeting of the National Heating and Airconditioning Wholesalers' association held in New York City. There were sessions designed to help the wholesaler set up dealer management training programs, sessions to aid the wholesaler in building a stronger business organization, sessions on advertising, management and employee training. There was one day set aside for manufacturers to meet with wholesalers and discuss their products in the business conference booth area. All the programs pointed out the value of educating every employee of a firm, from top management to the stockroom laborer.

Officers elected are Gail C. Mason, president; Glenn A. Ashburn, president-elect; A. G. Earnshaw, vice president; Oscar P. Brauer, secretary; and A. M. Vorys, treasurer. Trustees elected are G. E. Egan, Jack Allen, Robert E. Holcombe, Harold W. Squire, E. D. Mott, T. J. Delaney, A. L. Thys, Harry L. Bruce, Paul W. Huish and Donald D. Piper. Wilbur R. Bull will continue in his capacity as executive director.

Believing that education starts at home, the wholesalers have conducted several development programs

under the title of Wholesalers' Integrated Development Approach (WIDA). The evident success of two trial courses has brought about the scheduling of several more of these week long programs. The program is under the chairmanship of T. J. Delaney, Minneapolis, who arranged for Howard P. Mold, director of training, Minneapolis-Honeywell Regulator Co., to outline the information covered in the WIDA program. Mr. Mold said, "The objective of this program is to make it possible for the wholesaler to increase the performance level of all employees by providing each employee with 1) a factual analysis of his performance; 2) guidance for improvement of his present performance; 3) an understanding of his responsibility for his improvement; 4) an understanding of what standards of performance he is expected to meet."

Other objectives pointed out by Mr. Mold were 1) to increase the operating efficiency of service and installation supervision by more clearly identifying those personnel who need help and the degree of help needed; 2) to increase the efficiency of the spending of training dollars by putting available time and money where it's most needed; 3) to provide better backing for selling



DISCUSSING THE EVENTS of the day are: (l. to r.) W. J. Olsen and Jack Allen. Standing behind Mr. Olsen W. J. Olsen and Jack Allen. Standing behind Mrs. Olsen is Harold W. Squire



OFFICERS AND TRUSTEES for 1956 are (l. to r.) seated: A. M. Vorys, O. P. Brauer, Gail C. Mason, Glenn A. Ashburn, A. G. Earnshaw, Wilbur R. Bull. Standing (l. to r.) are Charles R. Bennett, E. D. Mott, T. J. Delaney, Harold W. Squire, A. L. Thys and Jack Allen

activities, to help reduce field operating costs and to provide better service to dealers in order to influence future sales.

Concluding his outline on how to conduct an integrated development program, Mr. Mold said, "Guided experience is not offered as a cureall; there are needs in personnel development which it does not meet. It does, however, offer a basic approach to the problem of development or training at all levels.

"Moreover, guided experience offers a structural core around which the other methods and techniques of learning may be grouped. These are the outstanding values possessed by the method outlined."

Realizing that training is but one part of an educa-

tional program, the convention heard Jack Allen, Buffalo wholesaler, tell about his success with showroom displays and catalog design. Mr. Allen recommended that the services of a professional display man be used to lay out and decorate the wholesaler's showroom. The professional result achieved more than offsets the cost involved, according to Mr. Allen, who has arranged to have a local window dresser alter his showroom appearance regularly.

The use of a loose leaf pricing catalog has reduced to a minimum the misunderstandings that occur when increases in price are passed along to dealers. The hard back catalog describes the equipment by model, part number and capacity and shows the date the new price becomes effective. The new price sheets are printed and



"FOR HE'S A JOLLY good fellow" . . . very well expresses the appreciation accorded William H. Bowe, Jr. as Arthur M. Vorys presents commemorative booklet



THE PROBLEMS that have been causing a decrease in profits are brought to light by John Robertson in his analysis of business habits and trends



RECOGNITION OF SERVICES rendered to the wholesalers' association since its founding is accorded Grant Wilson on a bronze and wood plaque



SPEAKER HOWARD P. MOLD (left) is introduced by Walter J. Baak to E. D. Mott



LATEST MODELS of equipment available are explained as (l. to r.) Richard King, W. T. Griffiths, F. L. Ashworth, Noel E. Girard and Art Vorys talk it up



WHOLESALE AND manufacturers review product design (l. to r.) Charles R. Bennett, George W. Zimbelman, C. L. Brooks and Oscar P. Brauer

Scenes at the business conference

put into the mail as soon as they become known to the wholesaler. When the dealer receives the new price sheets he tears out and discards the old page and inserts the new price sheet. Though the initial cost of the well made hard back binder is higher than other forms of catalog pricing systems, Mr. Allen feels the lower cost of forwarding the various pricing sheets more than offsets the initial cost of setting up this system.

Is Wholesalers' Money Tied Up?

Business management is another part of the educational program that the wholesalers received from fellow members. John Robertson, Alliance, O. wholesaler, presented some statistics based upon a trend that has been taking place over a 10 year period. Mr. Robertson's report included a chart framed from data obtained from 4082 wholesalers located in every section of the country. This chart included the data from 200 balance sheets of heating wholesalers. His analysis of the chart showed that 89.45 percent of the wholesalers were discounting their bills in 1950 and that 79.48 percent are now discounting their bills. Current liabilities are dropping (75 percent of what they were 10 years ago). Inventory to monthly sales is up about 50 percent; accounts receivable up 40 percent; gross profits to sales down 12 percent.

These figures indicate that the trend is unfavorable when business conditions are healthy as they are today. Mr. Robertson urged each association member to make every effort to alter his own operation to reverse the trend. He pointed out that an increase in sales does not always mean an increase in profit because inventory frequently has to be increased to take care of the increase in sales volume. The resultant increase in accounts receivable and the amount of money tied up in this type of operation often pinches the type of service rendered. The return expected from the investment is often below that anticipated; thus, there is more work, overhead and other expense that results in no profit increase, he said.

A survey conducted among the association's membership has shown that the figures given here are closely related to the warm air heating wholesaling operation. The survey has also been checked against two other surveys conducted by associations covering related fields. The comparison shows that the warm air heating wholesaler is experiencing the same problems as other wholesalers and that by working together with other wholesaler groups, answers to some of these problems may be uncovered which will result in more favorable conditions for the wholesaling industry as a whole.

Air Conditioning Is Largest Influence

The opportunities in residential air conditioning were pointed out by S. J. Levine, General Electric Co., who said, "The largest single influence upon the American home life in the second half of the twentieth century will be air conditioning. Within the next 10 years, he indicated that some homes would have controlled ideal barometric pressure built in the home that will help to keep the family in the best psychological state of well-being throughout the year."

He called attention to the serious and growing problems of smog and dirt, stating that the function of air filtration in home cooling is becoming essential to health and cleanliness within the home.

"Health and well-being are deciding factors in the purchase of air conditioning by Americans, who are more health conscious than any other people in the world," Mr. Levine said. "Doctors and researchers as well as homeowners recognize today that proper control of indoor climate through air conditioning can provide healthier standards for living."

"The recent action by the Internal Revenue Bureau to allow tax deductions on cooling equipment for patients suffering heart trouble, asthma and other diseases is typical of the significant role that medical authorities now give to home air conditioning. The recent Air Conditioned Village experiment at Austin, Tex. proved that



IT'S ALWAYS GOOD to see old friends says Frank Gibbons (left) to F. Lowell Curtis, W. S. Moel-lering and William J. Gold



HERE'S WHAT you want to know, says H. M. Carnahan (center) in answer to John Robertson's question. N. F. Foulds listens



THERE WAS ALWAYS room for one more as A. D. Julian, William Schoedinger, Martin M. Gracer, Frank Gibbons and Milton Hinden crowded around the table

healthier standards prevail in air conditioned homes. More recently, statements by doctors following the heat records set this summer — in which a 40 percent increase in the death rate was noted in New York City alone — indicate the growing awareness among important medical people that air conditioning actually helps individuals stay healthier, more comfortable, and at the same time, more productive.

"The benefits of air conditioning are so numerous that there isn't time to discuss them all, but there are certain ones which I want to mention with great earnestness and downright conviction.

Dispel Cost Apprehensions

"One of the most important tasks that lies before us in the industry today is to dispel the misconception that has been allowed to build up that air conditioning for the home is expensive. Air conditioning for the home is relatively inexpensive. When we analyze the cost of owning air conditioning in its proper perspective, I think you will appreciate the wrong judgment that has been placed on owning home air conditioning.

"Let me quote you some figures that help shed some light on this thinking. You know what a power lawn mower is and I suppose you know that it represents a sizable business in this country. Chances are many of you own one. Have you ever considered how much it costs for the privilege of owning and operating this lawn mower? Let's take another item that is becoming common in the home: the clothes washer and dryer. Many of you have washer-dryer combinations in your homes. This appliance, like the lawn mower, has grown into a large business, but have you ever stopped to think how much it costs you to own and operate it? And the automobile! What's the purchase and maintenance cost for this vehicle that we use every day of our lives and which we have come to take for granted? The power lawn mower costs about \$1.50 per hour to own and operate. The washer-dryer costs a home owner \$0.90 an hour to own

and operate, including normal depreciation, maintenance, etc. You may be slightly startled to realize that to own and operate your automobile, the price is anywhere in the neighborhood of \$3 to \$6 an hour. A central residential air conditioning unit should cost only about \$0.30 an hour to own and operate. The owning cost for central air conditioning is pretty low."

Increase Public Relations Activities

The value of good public relations was pointed out by John Doscher, executive director of Operation Home Improvement, the industry-wide campaign to improve America's homes. Mr. Doscher urged each wholesaler to become an active member of his local group in promoting the program throughout 1956. He indicated that by being associated with the ideal of the program, the wholesaler would be in a position to uncover excellent sales leads for the products handled. The use of a prepared kit that will help each segment of industry tie in with Operation Home Improvement was outlined.

The value of outdoor advertising and what to expect from different types of signs was explained by T. W. Lord, vice president, Outdoor Advertising, Inc. Mr. Lord had some sample signs, one for use with warm air heating promotion which was intended for a 300 sq ft sign. It pictured the sun radiating cheerful rays with this wording: "Let us keep you warm in winter." There was a place for a dealer's or wholesaler's name, address and phone number.

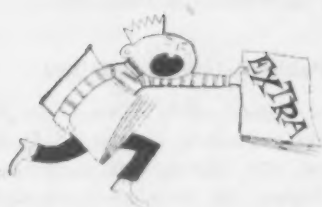
The wording must say something important very briefly to be effective; according to Mr. Lord, eight to 12 words are recommended because exposure time is about 21 seconds.

The conference booth story is told here in photographs. An interview with both wholesalers and manufacturers indicated an overwhelming approval of the program. Both industry segments commented, "I had an opportunity to see just about everyone I know and to make many new acquaintances."



NEW ENGLAND HOMES of this type are subscribing to the benefits of year 'round air conditioning in larger numbers each year

Warm Air 'Extras' Sell



By F. W. Legler
Waterman-Waterbury Co.



CHECKING THE MERCURY tube switch that limits the bypass damper position and oil burner operation is dealer N. C. Macdonald (right) and F. W. Legler, manufacturers' representative

A NEW TREND in the method of heating and cooling New England's finest homes was noticeable during the summer of 1955. An example is a seven room ranch style home in Weston, a town near Boston. The house has three bedrooms, den, living room, kitchen, sun parlor, two baths and full basement. The heating system uses a 112,000 Btu furnace, a perimeter air distribution system with wall diffusers and a return system with openings in every room except baths and kitchen. The living room has two return openings. The cooling system consists of a three ton air cooled remote condensing unit located outside the structure and a four row vertical coil in the supply duct. The coil is fed by a thermostatic expansion valve. The system was designed and installed by Norman C. Macdonald of So. Natick, Mass.

Bypass Arrangement Tempers Air Properly

The heating cycle uses a built-in bypass system that shunts some of the air around the furnace heat exchanger. The remaining air is passed across the heat exchanger and the two air streams are mixed in the discharge plenum. The tempered air is then delivered to the air distribution system. This method of tempering the supply air permits the air distribution system to deliver lower temperature air to the diffusers in mild weather and higher supply air temperatures on colder days.

The modulating motor which controls the mixing dampers is actuated by the room thermostat. The burner is controlled by an indoor-outdoor thermostat that adjusts the supply air temperature to match the rate of heat loss from the building. The fan is in constant operation and a bonnet air temperature is maintained as long as the outside air temperature is 70 deg or under.

"It's the extras that make it possible for us to sell warm air heating systems to the builders of quality homes in

**The swing to year 'round comfort
with warm air in large New England homes is earned
by quality minded dealers who install carefully
designed systems such as described here**

Quality Heating, Cooling Market

an area where wet heat systems have long been written into the architect's specifications," says Mr. Macdonald. "We feel it's our responsibility to the warm air heating industry to point out the many features that can be offered exclusively in a well engineered warm air heating system." The points he makes when talking with builders and architects include: even temperatures from the floor to the ceiling; warm floors; streak-free walls; clean, humidified air at all times; even temperatures in all rooms; and the adaptability to summer cooling.

The higher priced homes in New England are being purchased by people who want only the best and builders are finding that the question of summer cooling for the home is being raised by more of the prospective home buyers. The advantage of being able to offer this feature is helping sell more "comfort designed homes," as one builder is advertising his homes. The willingness of the warm air heating dealer to stand behind his installation with a quick response for service is proving to the purchasers of his equipment that they made a wise choice in selecting the warm air system. There is evidence that this feeling is being passed along from home owners to their friends, because many of the inquiries received by warm air heating dealers start with "I was talking with my friend, Jack Smith, and he told me . . ."

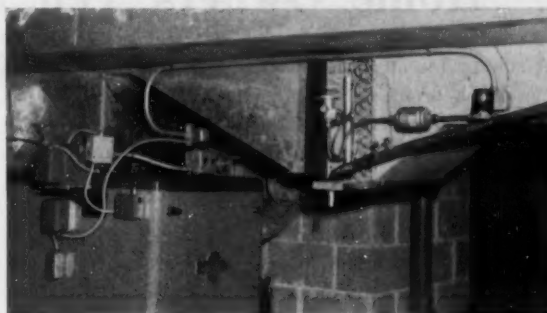
Acceptance Must Be Earned

This kind of acceptance can only come about when it is deserved. To earn this respect, every detail of the installation must be given due consideration when it is specified and after it has been installed. It's the little things that count.

Some of the extra engineering features are shown in the accompanying illustrations. The one with the cooling coil shows how the supply duct was expanded to accom-



"DOG HOUSE" for air cooled condensing unit is mounted on slab which is separated from the foundation wall. Note the outside thermostat control element mounted against the building



COOLING COIL and components for summer air conditioning are accommodated by expanded supply duct designed to obtain specified air velocity over the coil surface

moderate the coil. The drain pan is directly beneath the coil. Had the coil been placed diagonally, condensate would have not drained into it as quickly as it now does. The air flow through the coil has been slowed down to the velocity recommended by the manufacturer. Again, had this coil been placed in a diagonal position the air velocity would have been higher than recommended with the result that supply air temperatures would have been higher than required.

Flexible Connection Cuts Noise Transmission

Another engineering extra is a flexible duct connection between the cooling coil and the furnace. The photograph of the "dog house" for the air cooled condensing unit shows the concrete foundation poured close to the building foundation, but the slab is not against the foundation. Instead it is spaced 1 in. from the wall, because it has been found that when the slab is poured against the foundation wall the vibration caused by the condensing unit and fan is often transmitted to the structure. Mr. Macdonald either leaves a 1 in. space between the slab and wall or places an insulating board between the two.

Extras Are Essential to Quality Systems

On the heating side, many extras can be offered. The automatic electronic air filter, the humidifier and the air sterilizing lamp are a few. The systems installed by Macdonald Heating Co. all use the automatic supply air temperature control system. Mr. Macdonald says, "There are such things as minimum requirements for a heating system. Each dealer sets what he considers to be the minimum. I consider all the features essential and try to convince my prospects that the small added cost of each is well worth the investment. I also feel that my reputation is directly connected with each job I sell; therefore, I have set as my minimum requirements the furnace, diffusers under each window, a return air outlet for each room (except baths and kitchen), an outside-

inside control system in conjunction with modulated bypassed air dampers and a humidifier."

Mr. Macdonald says he finds it necessary to provide a drawing of the electrical circuit and to supervise personally the work of the electrician to obtain the kind of electrical control system he considers satisfactory in his installations. He has found the time he spends on supervision of the electrical work pays off in eliminating future service calls.

Another of Mr. Macdonald's sales approaches has proved its merit. He says he sells heating systems like the furniture dealer sells furniture: find out what the prospect wants to buy and then build the basic system to include all the extras that will improve the prospect's comfort. "It takes more time," he says, "but I find it worth the effort."

Customer Comments Back Sales Story

During the sales presentation Mr. Macdonald frequently quotes comments made by people for whom he has recently installed heating and cooling systems. The house illustrated in this article is owned by a Mrs. Link, who said that she had found the summer of 1955 was the most pleasant she had spent in the Boston area because of two outstanding conditions: 1) provision of a haven from long hot spells by her residential cooling system; 2) elimination of a good deal of monotonous housework. "During previous summers," she reflects, "it was necessary to keep all windows open to obtain maximum cross ventilation and of course, whatever comfort was gained was paid for by the necessity for more frequent dusting and the admission of street noises. With summer cooling the windows are kept closed and both noise and dust are reduced. Another advantage that is not often considered but one which is certainly important is the fact that new drapes and furniture retain their fresh appearance much longer. Where previously it had been necessary to dust every day, I now go over the house once a week and find less dust than I did at the end of each day during previous summers."

Home Owners Tell About Cooling Benefits

A SURVEY recently conducted by Worthington Corp. discloses the people living in air conditioned homes feel better, sleep better and have more time and energy to spare. The company queried a cross section of home owners in whose homes year 'round units are installed, for the purpose of discovering what added benefits air conditioned living has to offer.

Of the home owners surveyed, 40 percent responded. Here are some of the results shown in percentages based on the 40 percent response figure:

- 63 percent reported improved appetites among individual members of the family.
- 75 percent serve more hot meals in summer.

- 58 percent reported an improvement in dispositions of individual members of the family.

- 43 percent reported they have more recreation time on their hands.

- 63 percent reported they have more energy.

- 65 percent reported improvement in general health of the family.

Operating costs varied considerably, depending on location, type and size of home, shading, insulation, etc. Average operating costs for cooling per year indicated by the answers were: southwestern area, \$137.75; southern, \$73.33; southeastern, \$119.00; eastern, \$87.50; central, \$93.00; and western, \$87.50

Making a Round Pipe Intersecting A Straight Side Tapered Tip

... for applications such as this plating exhaust system in which horizontal duct runs are pitched toward the tank for adequate condensate drainage

IN PRESENTING A practical application for a round pipe intersecting a straight side tapered duct, a plating exhaust system has been selected.

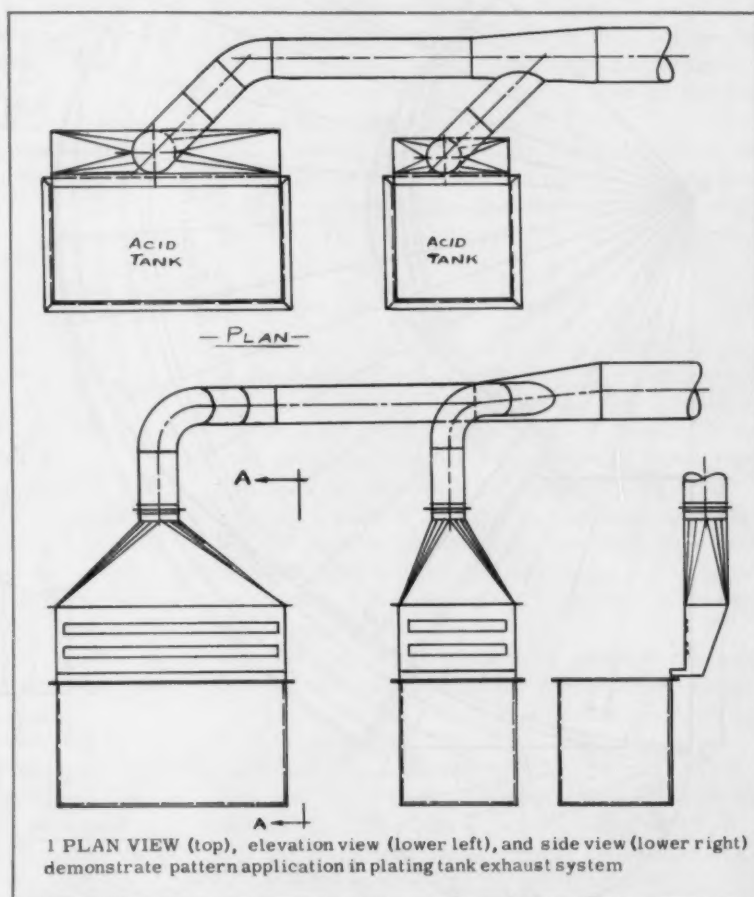
In this type of exhaust system where air with a high moisture content is being handled, it is necessary to eliminate all water pockets in the horizontal ducts and to pitch horizontal duct runs slightly toward the tank for drainage.

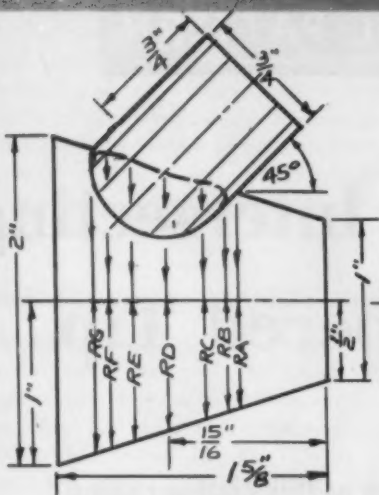
Fig. 1 illustrates the proper design of a straight side taper and branch connection on a horizontal duct line where condensate drainage is a factor.

In analyzing the practical solution of the pattern problem, it is noted from the front view (Fig. 2A) and end view (Fig. 2B) that the taper is symmetrical about the horizontal center line; thus, all the true length lines for the intersecting round pipe can be produced on a half front view and half end view drawing, as shown in Fig. 3.

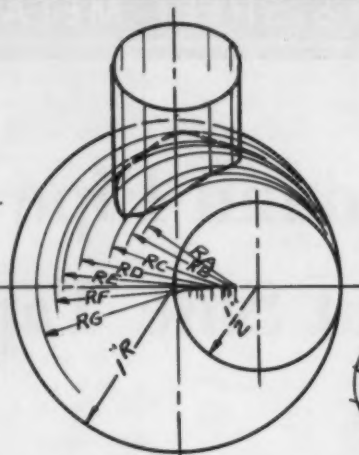
The offset taper pattern development (Fig. 4) is solved by the radial line method. This method is less time consuming than layout by triangulation and should be given preference wherever its use is possible.

Note that in development of the

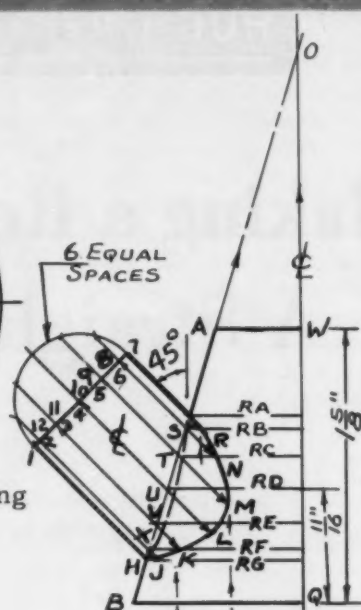




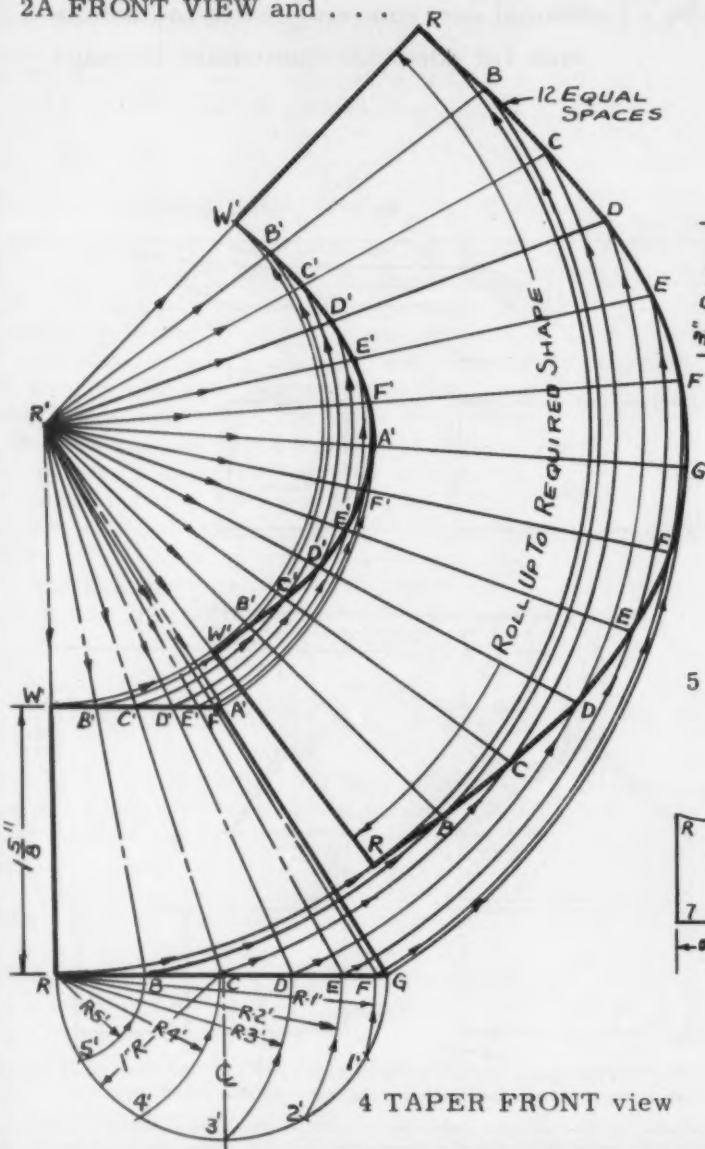
2A FRONT VIEW and . . .



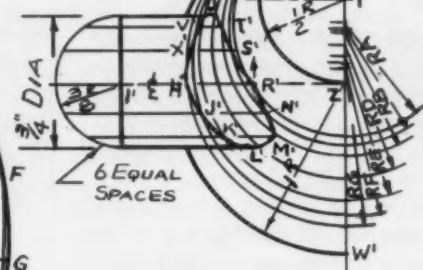
2B END VIEW of fitting



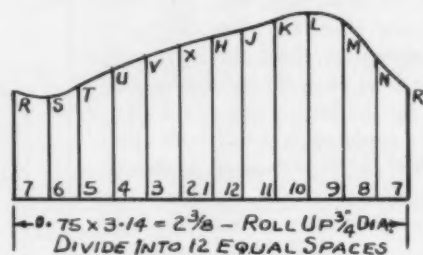
3 HALF FRONT view or simplified method drawing (top) and half end view



4 TAPER FRONT view



5 TAPER pattern (left)



6 INTERSECTION pipe pattern

offset taper, the equally spaced points on the half circle are revolved from point R (Fig. 4) upward to intersect line RG, and not drawn vertically from the points as in a straight taper development.

The revolution of the points from the half circle to base line RG of the taper will produce true length lines as indicated by lines R'B to R'F inclusive. These lines can then be transferred to the pattern as indicated by the directional arrows as shown on Figs. 4 and 5.

The following is a step by step solution of the pattern development problem.

The Simplified Method Drawing, Fig. 3 —

a) Draw the extended vertical center line CL. On this line establish the point W. From point W down the vertical center line, measure the given length of the taper as shown on Fig. 2A, which is $1\frac{5}{8}$ in., and mark the point Q. Through points W and Q, draw lines to the left of and perpendicular to the center line.

b) From point W, extend a line equal to the given radius of the small diameter (Fig. 2A) which is $\frac{1}{2}$ in., and mark the point A. From Q, extend the given radius of the large diameter of the taper which is 1 in. and mark the point B. Draw an extended line through points B and A to intersect the center line at O.

c) From point Q measure up the vertical center line $11/16$ in. and draw a horizontal line from this point to line BA. Designate this line RD. From the point where this line intersects line BA draw the center line of the round pipe at a 45 deg angle to vertical center line OW'.

d) From the intersection point of the 45 deg line and line AB, measure $\frac{3}{4}$ in. and mark the point 4. Through this point draw a line perpendicular to and extending on both sides of the 45 deg center line.

e) From point 4, measure the given $\frac{3}{8}$ in. radius (half of the $\frac{3}{4}$ in. diameter in Fig. 2A) and draw a half circle. Divide the half circle into six equal spaces and through the points draw extended lines parallel to the 45 deg center line. Mark these lines 1 through 12 as shown. From the intersection points of the 45 deg lines and line BA, draw lines perpendicular to and intersecting center line QW. Mark the lines RA, RB, RC, RD, RE, RF, and RG.

f) On the vertical center line establish point Q', and from this point measure the given radii of the taper which are 1 in. and $\frac{1}{2}$ in. as shown in Fig. 2A. Mark the points Y and Z. With point Z as center and radius 1 in., draw a half circle to the left of the vertical center line. Where the lower end of the half circle intersects the vertical center mark the point W'. With point Y as center and radius $\frac{1}{2}$ in., draw a half circle to the left of the vertical center line.

g) From point Z, draw the center line of the round pipe. This line is perpendicular to the vertical center line Q'W'. From point 4 on the 45 deg line (half front view) project a line parallel to center line OW' to extend on both sides of the horizontal center line extending perpendicular to the left of point Z. Mark the point where

this extended line intersects the horizontal line as point 1'.

h) With 1' as center and radius $\frac{3}{8}$ in., draw a half circle to the left. Divide the half circle into six equal spaces and through the points draw lines parallel to the center line Z-1'.

i) With a compass, measure length RA on the half front view, and with Q' on the half end view as center, draw an arc cutting center line W'O. With this point as center, and radius RA, draw an arc to cut line Z-1' and mark the point R'. From R', project a line parallel to the center line W'O to intersect line 7 on the half front view. Mark the point R.

j) Measure length RG on the half front view. With Q' on the half end view as center, draw an arc cutting center line W'O. With this point as center and radius RG, draw an arc to intersect line Z-1' on the half end view. Mark the intersection point H'. From H' on the end view, project a line parallel to center line W'O to intersect line 1 on the half end view. Mark the point H.

k) On the half front view, measure radii RB, RC, RD, RE, and RF. Working from point Q' on the half end view, draw arcs to intersect center line W'O. With these points as centers, and radii RB, RC, RD, RE and RF, draw arcs to intersect the horizontal lines paralleling center line Z-1' at the points shown. Mark these points as J', K', L', M', N', S', T', U', V' and X'. Through the developed points draw the intersection line of the round pipe and the offset taper on the end view.

From the intersection points of the lines and arcs on the half end view, project lines parallel to center line OW' to intersect the corresponding lines on the half front view, and mark the points H, J, K, L, M, N, R, S, T, U, V and X. Through the developed points draw the intersection lines of the pipe and taper on the half front and half end views. (Note the letters are repeated on the front view, Fig. 2A and the end view, Fig. 2B for clarity.)

The Taper Pattern, Figs. 4 and 5 —

a) Draw a right angle and mark the intersection point of the horizontal and vertical lines R. From point R measure up the given length of the taper which is $1\frac{5}{8}$ in. and mark the point W'. From point R, measure to the right the given diameter of the large end of the taper which is 2 in., and mark the point G.

b) From point W', draw a line perpendicular to line RW'. Measure to the right the given small diameter of the taper which is 1 in. and mark the point as A'. Draw the line A'G. Extend the lines A'G and W'R to intersect. Mark this point R'.

c) From point R, measure 1 in., and with this point as center and given radius 1 in., draw a half circle below line RG. Divide the half circle into six equal spaces and mark the points 1', 2', 3', 4', 5'.

d) With R as center and radii R1', R2', R3', R4', R5', draw arcs to intersect diameter line RG and mark the points F, E, D, C, B. Draw the work lines R'F, R'E, R'D, R'C and R'B. Mark the intersection points of the lines on the small diameter F', E', D', C', B'.

e) With R' as center and radii R'R, R'B, R'C, R'D, R'E, R'F and R'G, draw long arcs to the right of point R'. Establish line R'R on Fig. 5. Set a compass at equal space distance R5' on the half circle (Fig. 4) and working from point R on Fig. 5 step off points B on arc R'B, C on arc R'C, D on arc R'D, E on arc R'E, F on arc R'F, G on arc R'G. Also step off second point F on arc R'F, second point E on arc R'E, second point D on arc R'D, second point C on arc R'C, second point B on arc R'B and second point R on arc R'R.

f) Draw working lines from point R' to all points established on Fig. 5 as R, B, C, D, E, F, and G.

g) With R' as center and radius R'W' (Fig. 4) draw a long arc to intersect lines R'R (Fig. 5) at points W'. Follow the same procedure for radii R'B' at B', R'C' at C', R'D' at D', R'E' at E', R'F' at F' and R'G' at A'. Also second point F' on arc R'F', second point E' on arc R'E', second point D' on arc R'D', second point C' on arc R'C', second point B' on arc R'B', and second point W' on arc

R'W'. Through the developed points draw the pattern outline. Mark the patterns for fabrication.

Intersecting Round Pipe Pattern, Fig. 6 —

(a) Calculate the pipe circumference by multiplying the given $\frac{3}{4}$ in. diameter by the constant 3.14; thus 3.14×0.75 equals 2.355 or $2\frac{3}{8}$ in.

(b) Draw a horizontal line $2\frac{3}{8}$ in. Divide the line into 12 equal spaces and number the points 7, 6, 5, 4, 3, 2, 1, 12, 11, 10, 9, 8, 7, as shown. Through the points draw lines perpendicular to the horizontal line.

(c) From the half front view drawing, Fig. 3, measure line 7-R and transfer this measurement to vertical lines 7 (Fig. 6). Mark the points as R.

(d) Transfer lengths 6-S, 5-T, 4-U, 3-V, 2-X, 1-H, 12-J, 11-K, 10-L, 9-M, 8-N, from the half front pattern (Fig. 3) to the corresponding lines on Fig. 6. Mark the corresponding points as shown. Draw the pattern outline.

Who's Liable for Defects in Manufacture?

IN THE PERFORMANCE of a contract for the installation of an air conditioning and heating system in a southern residence, equipment had been purchased by the contractor from an out-of-state manufacturer. When it failed to function properly the owner of the residence sued the dealer, not for damages but for a cancellation of the contract and a recovery of the money he had paid.

History in Dealer's Favor

The dealer contended that the owner was not entitled to a cancellation of the contract but only for damages for its breach. This defense has been repeatedly before the courts and the dealer almost always has been held free of liability.

"The theory upon which a warranty of quality and fitness is impliedly charged against the manufacturer and not against the dealer," said one northern state court, "is that the manufacturer must know his own methods of manufacture and the purpose for which his product is designed and may properly be held to have contracted to produce and manufacture an article for that purpose.

"But a dealer, that is, one who merely buys to sell again, is not presumed to possess such knowledge. He

is an intermediary between the manufacturer and the consumer."

Many of the states have enacted a Uniform Sales Act which provides:

"There is no implied warranty or condition as to the quality or fitness for any particular purpose of goods supplied under a contract to sell or a sale except, where the buyer expressly or by implication makes known to a seller the particular purpose for which the goods are required and it appears that the buyer relies on the seller's skill or judgment, there is an implied warranty that the goods shall be reasonably fit for such purpose."

No Implied Warranty

One legal authority has summarized this rule of law, "The general rule of the common law expressed by the maxim that the buyer must needs look out for himself, is that the buyer purchases at his peril and there is no implied warranty by law on the part of the seller with respect to the quality of the specific article sold."

Of this rule of law a member of the law faculty of an eastern university has written:

"Every day we engage in activities which we reasonably believe to be

safe because we assume certain facts to exist, and believe they exist and yet know that if the facts do not exist the activity will be highly dangerous.

"That is true, for example, of every driver of a new automobile, or every person who fires a new rifle. Every day all of us constantly make 'factual' statements about matters of which we have no more than second hand information. Consequently a seller's honest representation that a chattel is free of defects, when based on reliable past experience, cannot be branded as a negligent act merely because the seller has not personally investigated the chattel."

The U.S. Supreme Court set forth an applicable ruling nearly a century ago:

"No principle of the common law is better established or more often affirmed both in this country and in England," said that court, "than that in sales of personal property in the absence of an express warranty, where the buyer has an opportunity to inspect the commodity and the seller is guilty of no fraud and is neither the manufacturer or grower of the article he sells, the maxim that the buyer must needs look out for himself applies."

[Note: While this discussion applies to actual cases, it should be remembered that legal rules vary in different states.]

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This advertisement appears in ARCHITECTURAL FORUM, ARCHITECTURAL RECORD and PROGRESSIVE ARCHITECTURE. It tells Architects, Builders and Engineers the many advantages of specifying enduring Revere Copper for their jobs, thus promoting the use of more copper by you... the metal you prefer to work with... the "ageless" metal that you can trust to protect your reputation for a quality job.

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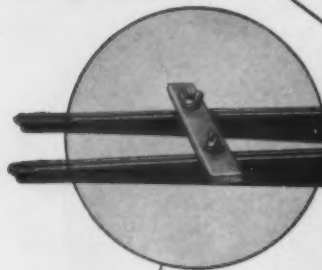
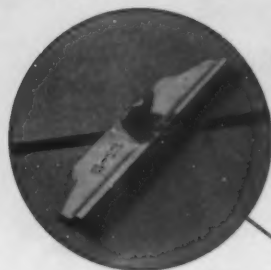
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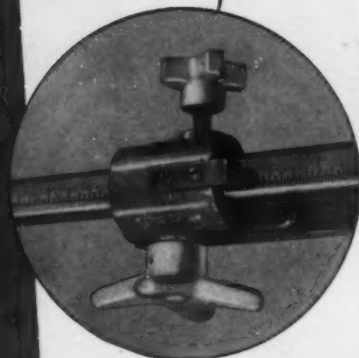
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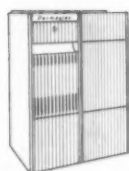
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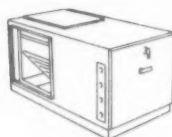
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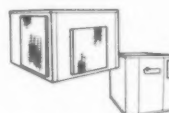
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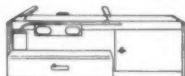
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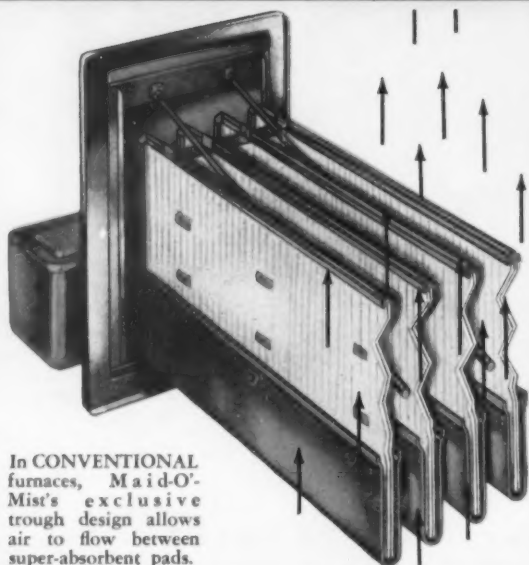
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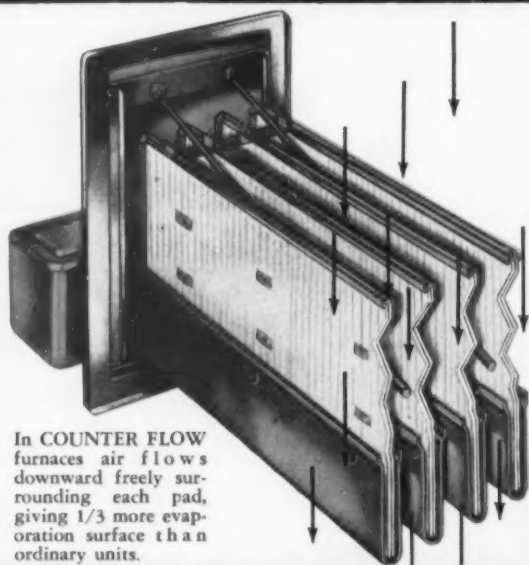
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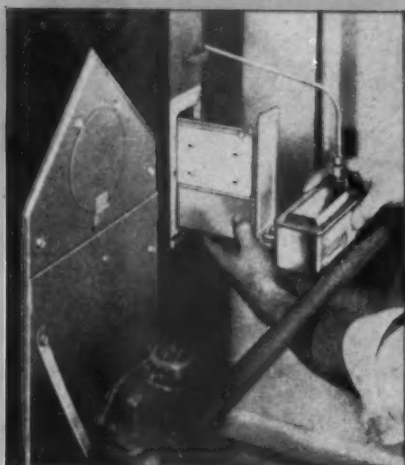
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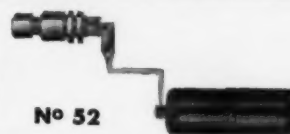
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Only 5 3/4" long overall, including copper float 2 1/8"
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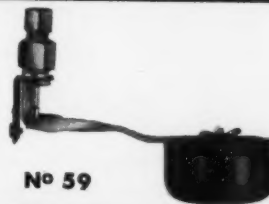
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DATA OBTAINED from testing many residences in all parts of the country has been used to formulate the classifications for heating system performance

Here Are Proposed Standards for Room Air Temperatures

... which take into account the basic
temperature measurements that will result in maximum
heating comfort throughout the living area by providing
starting points for temperature balance

By S. Konzo and H. D. Bareither
University of Illinois

IN PRECEDING articles in this series, several standards were proposed for the mechanical equipment, including the burner and the blower. With this issue we propose some standards for room air temperatures.

Specifications for heating systems commonly state that the heating plant shall be capable of maintaining an indoor temperature of 70 F when the outdoor air temperature is at some stated value, such as zero F. At first glance this seems to be a reasonable requirement. On closer inspection, however, it becomes apparent that the specification is practically meaningless; neither the heating dealer nor building owner could agree on details such as:

(a) Should temperature measurements be made in every room in the building, or only in one room?

(b) Should the measurements be made at the 60 in. level, the 30 in. level, or some other level?

(c) Should measurements be made in every part of every room, or every part of any single room?

(d) When should the measurement be made? A temperature of precisely zero F may seldom be reached and when it is, it usually occurs at most inconvenient hours for testing.

(e) Are we considering a maximum temperature of 70 F, a minimum of 70 F or an average of 70F?

Obviously then, the usual specification leaves much to the imagination and is practically meaningless as a standard of performance.

In the opinion of the writers, six measurements of room temperatures have some significance as far as comfort is concerned. These six basic measurements are as follows:

Standard 1 — Control of room air temperatures: A room thermostat which is set to maintain a room air
(Continued on page 128)



- NEW -

FORCED-AIR GAS-FIRED HEATERS

A GOOD BRAND

CONVENTIONAL FLOW UNITS

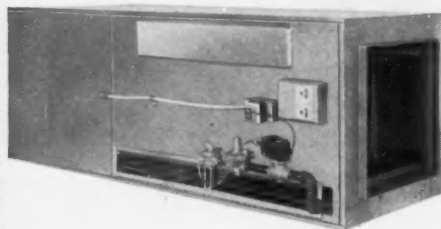
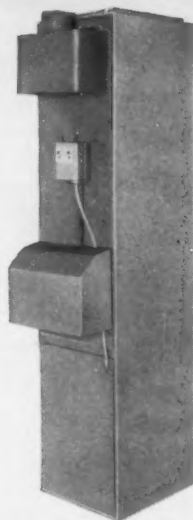
Two sizes HBD-70 Input rating 70,000 Btu., HBD-85 Input rating 85,000 Btu. Have return air inlet at bottom of unit, warm air outlet at the top.

All Heaters are equipped with "Whisper-Quiet" rubber mounted direct drive blower.

Compactly designed for minimum floor space.

All heaters are equipped with fully automatic controls. Each heater is shipped ready for installation, no expensive on-the-job assembly required.

All heaters are A.G.A. Approved for operation with natural, mixed, manufactured and LP gases.



ATTIC TYPE AFS-110, Input 110,000 Btu.

Side flue outlet requires no additional height for diverter installation

Space requirements kept to absolute minimum.

Attractive grey-green hammer finish.

DOWN FLOW UNIT

CFD-85, Input 85,000 Btu. Has return air inlet at top, and warm air outlet at bottom suitable for perimeter heating.

Equipped with permanent type filters.

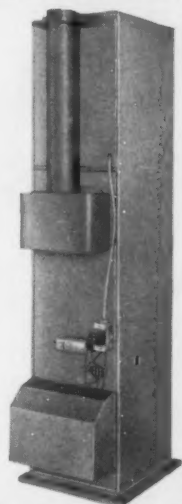
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All heaters are rigidly inspected and individually tested at the factory before shipment.

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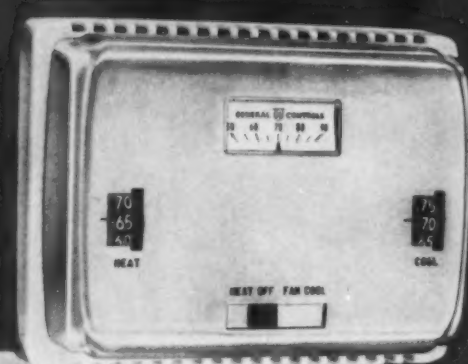
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automatic changeover and combination
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T-99

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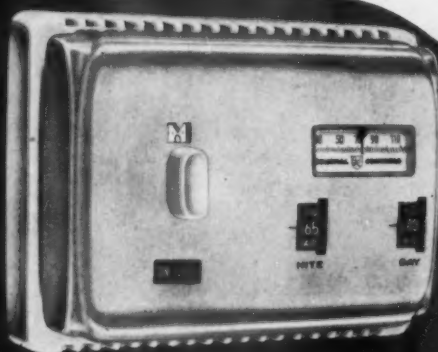
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integral heat anticipation...
independent roll-dial with large
numerals... satin finish, lifetime
stainless steel case.

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Matched design for matchless performance

no selection so complete,
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as in General Controls'
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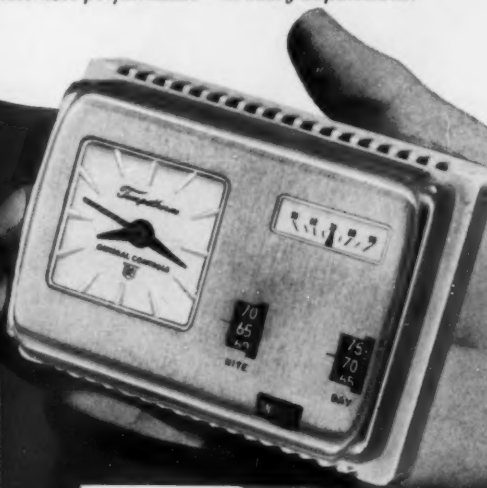
These are three of many good reasons why you find more and more General Controls thermostats in *perfect control* in homes across the nation: *Manufacturers* know they can rely on them to bring out the very best in the products they build; *dealers* install them confident in their ability to guarantee customer satisfaction and goodwill; and *homeowners* proudly select them for the faultless beauty of their *slim silhouette* styling, and the famed dependability of their straight-line temperature control. All three special viewpoints agree on the one right answer to their individual problems — the General Controls matched line for *matchless performance* — in every department!



T-265

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Temperature Uniformity Stressed in Standards

(Continued from page 124)

temperature of 73 F can maintain that temperature at the thermostat location. We are interested however, in determining how far the temperatures in the center of the room deviate from 73 F during normal operation of the burner.

Standard 2 — Temperature balance between rooms: The interior of the average home is not composed of a series of closed cubicles, but is more like a big space with a few partition walls between the rooms. The occupants expect a uniform temperature in all rooms and do not expect to be conscious of any change in environment temperature when they move from one space to the next.

Standard 3 — Temperature uniformity in living room: The fact that the room temperature is 73 F at a thermostat location in the living room does not guarantee that the air temperature in the corners of the same room will also be 73 F. The uniformity of temperatures is particularly important in the living room, and at normal living heights of about 30 in. above the floor.

Standard 4 — Temperature difference from floor to ceiling: The temperature difference from the floor to the ceiling in the room gives an indication of the uniformity of heating in the vertical plane.

Standard 5 — Temperature difference from floor to 30 in. level: The temperature difference at these two levels in the lower part of the room is most significant from the standpoint of comfort.

Standard 6 — Floor surface temperatures: The temperature of the floor surface affects foot and ankle comfort.

One other standard that measures the wall and glass surface temperatures might be included. In our opinion the six standards listed here can measure the performance of any heating system from the standpoint of comfort. Unfortunately, because there are no numerical standards for these items it becomes necessary to propose some arbitrary levels. It is distinctly possible that any such set of numerical standards may have to be revised with time and experience.

Standard 1 — Control of Room Air Temperatures

The room thermostat can control the air temperature near the instrument. However, if the thermostat is located in a secluded corner, or next to heated wall surfaces, the temperatures in the middle of the room might be different from those at the thermostat. From the standpoint of comfort we are more interested in the air temperatures in the middle of the room than in the temperatures at the thermostat. Hence, a spot at table height near the middle of the living room is suggested as the location for observing the temperature fluctuations during a normal burner operation.

Precautions for Measuring Air Temperatures

Air temperatures can be observed with glass thermometers or with sensitive electrical instruments used in research work. Obviously, the heating dealer will normally rely on the more practical glass thermometers although they do not respond as rapidly to room air temperature changes.

For example, while a temperature change of 5 F is measured by means of sensitive electrical instruments during a period of two minutes, the glass thermometer may only show a change of 3 F. Furthermore, it is difficult to read a glass thermometer closer than about $\frac{1}{2}$ deg. Hence, if we set a standard in which we use glass thermometers as the accepted instrument, a measured change of say 1.0 F will prove possibly 1.5 or 2.0 F when measured with more sensitive instruments.

STANDARDS FOR TEMPERATURE CONTROL

- CLASS A** Less than 1.0 F change in air temperature at the middle of the living room at table level, as observed with 10 in. glass thermometers. These changes are those between the maximum and minimum values observed during at least two cycles of burner operation
- CLASS B** Variations between 1.0 and 2.0 F (same thermometer location)
- CLASS C** Variations between 2.0 F and 4.0 F (same thermometer location)
- CLASS D** Variations larger than 4.0 F (same thermometer location)

The problem of setting standards is complicated by the fact that temperature changes involve human sensations, which are not the same in every individual. No statistics are available to show the smallest change in temperature that can be felt by an individual at rest. However, we believe a normal person cannot distinguish any difference in temperature within a range of several degrees. For example, when one is comfortably seated and

(Continued on page 132)

PARTNER for PROFITS



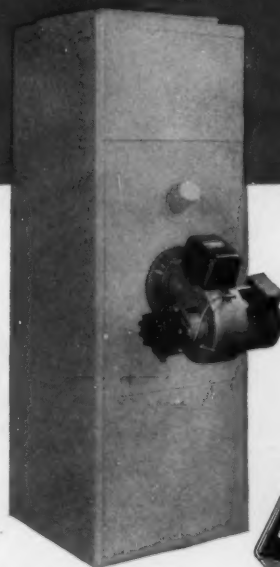
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Capacity: 0.65 to 1.50 G.P.H.

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For more facts and figures on the new 150 series, contact your U.S.-Carlin Wholesaler, or write . . .



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Because
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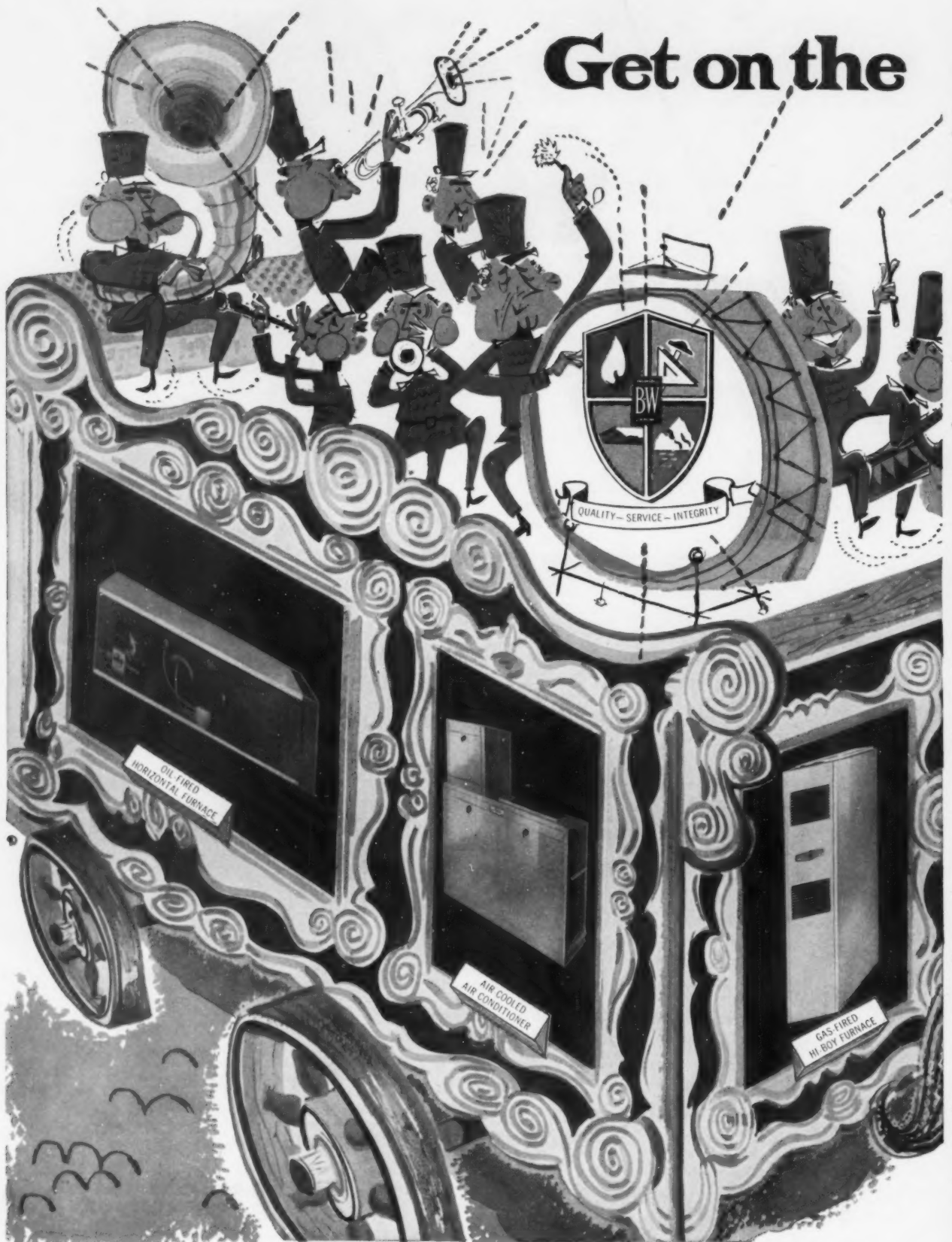


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RESULT: A combination that can't be beat . . . performance-wise . . . sales-wise . . . and profit-wise.

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Airline

HEATING AND AIR CONDITIONING

INGERSOLL
CONDITIONED AIR
DIVISION



BORG-WARNER CORPORATION

Proposed Standards Set Desirable Objectives

(Continued from page 128)

at peace with the world, it may be difficult for him to distinguish between air temperatures of 71 F and 73 F. A temperature-sensitive person might feel a trifle warmer but still comfortable at 75 F. The same person might feel cool at a temperature of 70.5 F.

Another individual may feel equally comfortable as long as temperatures are between 72 and 74 F, and somebody else may be comfortable over a 3 deg range of temperatures. The range of acceptable temperature change

will depend upon the health, vitality, conditioning and amount, style and type of material of the clothing worn by an individual and this may vary from morning to night.

Since the temperature change during a burner cycle will depend to some extent upon the severity of the weather, the standards are intended for average winter weather for the locality. In a cold climate slightly larger variations may be experienced than in a mild climate.

Standard 2 — Temperature Balance Between Rooms

In American practice, where the spaces in the house are not isolated from each other by closed doors, a uniform air temperature is usually maintained in all the rooms. For example, if a room air temperature of 73 F is considered satisfactory for the living room, the same temperature would be acceptable for the dining room, the bedrooms

and the recreation room. It is true that a slightly higher temperature might be tolerated or even desirable in the bathrooms.

As far as standards for uniformity of room air temperatures are concerned, an ideal condition might be one in which no variations in temperature exist.

STANDARDS FOR TEMPERATURE BALANCE

CLASS A The difference in temperature between the coolest room and the warmest room is less than 1.0 F. This does not include the bathrooms, which can be warmer than the other rooms. All temperatures are measured in the centers of the rooms at table height, and when no sun effect or effect

of cooking and washing operations are observed

CLASS B The difference is between 1.0 F and 2.0 F (same conditions as in Class A)

CLASS C The difference is between 2.0 F and 4.0 F (Class A conditions)

CLASS D The difference is over 4.0 F (same conditions as in Class A)

Standard 3 — Temperature Uniformity in Living Room

Since the living room is the key room of the house, the distribution of room air temperatures from one corner of this room to the other is of great importance to the occupant. A minimum of five temperatures are measured in the living room at the 30 in. level; one reading is made in the center of the room at table height, and four readings are taken at the four corners of the room with the thermometer located at table height and about 2 ft from the nearest walls. The proposed standards for temperature uniformity are presented here.

The standards in all categories proposed under class A and class B will not be easy to satisfy. In fact, few installations will come within class A limits during all weather conditions, and only some installations will meet class B limits most of the time. It is expected that a great majority of ordinary installations will come within the class C limits of temperature control and temperature uniformity between rooms. It should be clearly under-

stood that some homeowners will be most satisfied with a system that is giving class D performance. In general, the response of homeowners is most unsatisfactory for evaluating the performance of heating systems. To a very great extent the response will be dictated by the previous experience of the homeowner. For example, if the homeowner's previous installation consisted of inferior types of space heaters, even a mediocre central heating system that is giving relatively poor performance may be acceptable to the homeowner. We do know that the acceptance standards of homeowners will be higher as time goes on. We have set our standards high enough so there should be no necessity for revising them in the near future.

In this connection, the fact that the standards are proposed for domestic heating installations does not imply that they cannot be used for larger commercial and

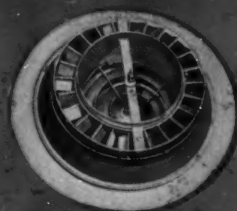
(Continued on page 138)



TYPE R Circular, adjustable volume, constant pattern and radius of diffusion.



TYPE V Circular, adjustable volume and pattern, for heating and cooling.



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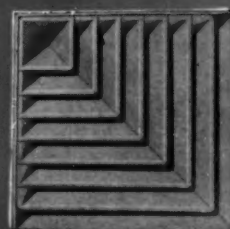
TYPE S Half-round, for side wall or ceiling, for heating or cooling.



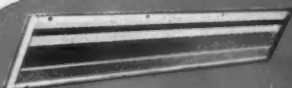
TYPE A Circular, adjustable volume, constant pattern **AUTOMATICALLY CONTROLLED.**



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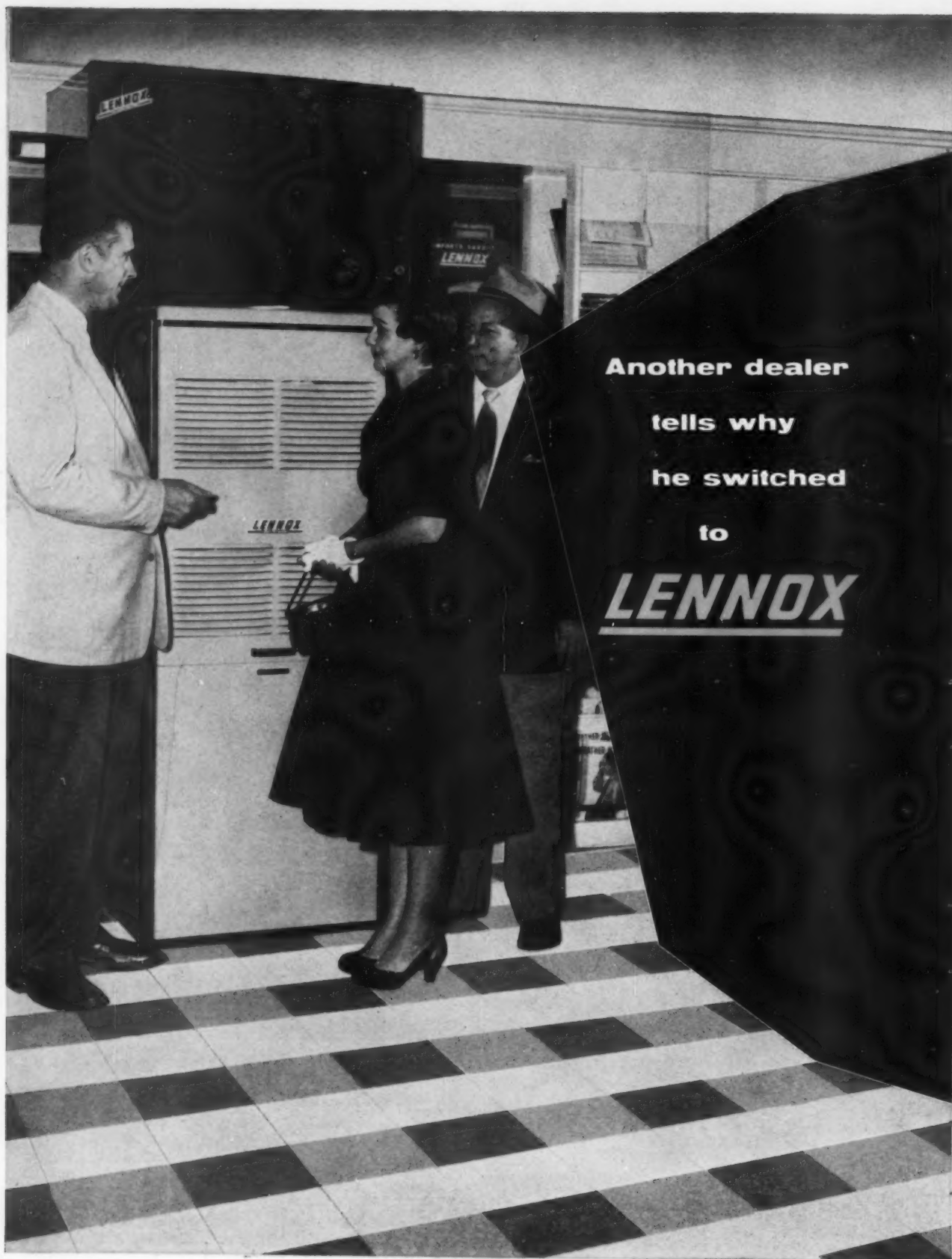
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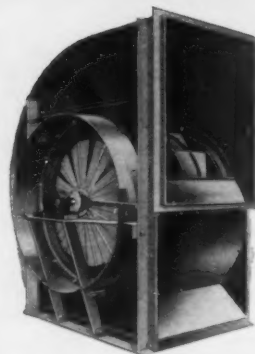
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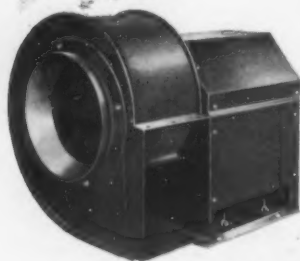
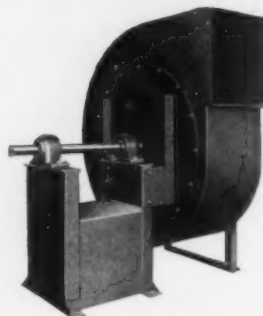
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Fan Equipment for
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Type DF wheels, housings, and complete fans for air conditioning units, cooling towers, evaporative condensers, etc. In 11 sizes from 250 to 10,000 cfm.



CLARAGE
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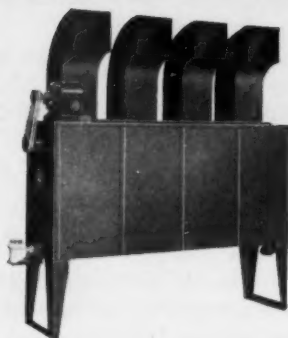
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Air Handling and Conditioning Equipment

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Ventilating and Air Conditioning Fans

Type NH Fans (shown) with backwardly inclined blade wheels, capacities 1,000 to 725,000 cfm. Type HV Fans with forward curved multi-blade wheels, capacities 150 to 450,000 cfm.



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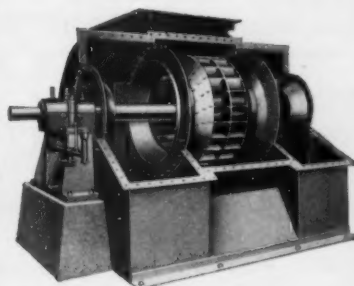
Unit Heaters

Unitherms (shown) equipped with multiblade fans, capacities 60,000 to 1,160,000 B.t.u. Clarco Heaters equipped with propeller fans, capacities 28,000 to 270,000 B.t.u.

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Industrial Air and Material Handling Fans

Type XL Fans range up to 130,000 cfm, 18" SP, 60" inlet diameters. Four wheel types, 16 fan sizes—smaller sizes adjustable as to discharge.



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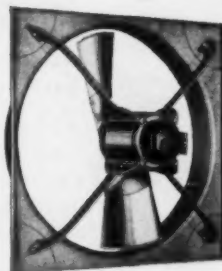
Mechanical Draft Equipment

Type RT Fans (shown) and other types of Clarage Fans are designed and constructed for induced draft, forced draft, and high pressure industrial applications.

CLARAGE

Industrial Exhausters and Blowers

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Comfort Progress Keyed to Know-How

(Continued from page 132)

industrial applications. We have found a domestic heating plant is frequently better controlled and better maintained as far as temperature control and uniformity are concerned than are the systems in some large structures such as schools, churches, offices and stores, in spite of the fact that the control equipment for the domestic plant is far less costly and usually is much simpler than those for the large buildings. In fact, the heating dealer who handles only small domestic heating plants need never despair over the amount of temperature control possible for a small system. The overheating of rooms and the necessity of opening windows in order to cool off the rooms are more frequently experienced with large buildings than with small homes.

The first reaction of a heating dealer on reading these arbitrary standards may be that we are complicating a situation and that he is being forced to become a technician. This is partly true. There was little progress in the heating business until precise measurements could be made. Progress in the future will require that we know what we are getting and know how much improvement has been made.

Before continuing with the proposed standards 4, 5

STANDARDS FOR LIVING ROOM TEMPERATURES

- CLASS A** Not over 1.0 F variation in air temperatures in the room at the five locations, in ordinary heating weather and with normal cyclical operation of the burner.
- CLASS B** A variation between 1.0 and 2.0 F (same conditions as in Class A)
- CLASS C** A variation between 2.0 and 3.0 F (same conditions as in class A)
- CLASS D** Any variation larger than 3.0 F (same conditions as in class A)

and 6 it is appropriate to digress awhile and consider the important role of the room thermostat in temperature control and temperature uniformity. Hence, in the next issues, we shall devote some space to the major developments in this field, especially as they relate to warm air heating.

6 Ways to Increase Small Duct System Capacity

THE REVISED EDITION of the National Warm Air Heating and Air Conditioning Association's Manual 10 emphasizes the point that while the technical information contained in the manual is concerned with a small pipe system using four inch pipes with furnace units rated at 0.20 total external water gage pressure with a temperature rise of 70 to 100 deg through the furnace, this does not exclude the use of small pipe systems of other sized pipes and other statistics.

Under the heading "Principles for Higher Capacity With Small Pipe Perimeter Systems," it is pointed out that the heating or cooling capacity of small pipe systems can be increased in several ways. It is explained that:

1) Streamlining for smooth air flow reduces resistance, permitting a given diameter run to handle more air at the same pressure. Manual No. 10 reflects the advantage of streamlining in the rating tables under certain specified conditions where an extra 10 percent capacity is allowed when streamlined take-off fittings are used. Further streamlining benefits can be obtained with long radius turns, long tapered transitions, and smooth collar-type (non-crimped) joints with longer lengths of duct to reduce the number of joints.

2) Increasing the duct diameter slightly, stepping up

the capacity, may reduce the number of rooms requiring extra runs — thus some manufacturers have provided data on 4½ in. diameter, others, 5 in. diameter duct, or a combination of 4 in., 4½ in. and 5 in. sizes. Such systems can operate with standard furnaces.

3) Increasing the pressure increases the air velocity through a duct, thereby increasing the flow rate and capacity. Such systems require furnaces approved at higher static pressures. Ducts and outlets must be designed to handle the higher velocity at acceptable noise levels and without drafts.

4) Increasing the temperature differential between the air carried by the duct and the room conditions increases the capacity at a given flow rate. This again requires furnaces designed and approved to operate at the special conditions and must comply with safety regulations.

5) Combinations of any of the above principles can provide still greater increases in capacity when used in accordance with manufacturers published data.

6) Smaller duct sizes such as 3½ in. diameter are also widely used. These smaller ducts may have more capacity than the tables in Manual 10 due to incorporating certain of the above principles.

5 FEATURES

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1. **MECHANICAL KEY BOND** that locks-in the flashing and becomes part of the masonry mechanically as well as through bonding action of mortar.
2. **POSITIVE WALL DRAINAGE** through a section design that automatically forms a series of individual drainage gutters away from the wall.
3. **QUICK SEALING END DESIGN** that will readily form to the contour of the masonry and crimp tightly.
4. **WATER-TIGHT CAP FLASHING** that will withstand heavy vibration and shifting of the masonry without failure.
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- 1 leaves the door open for summer cooling at a later date**
- 2 would overcome the high infiltration rate in the building**
- 3 would meet tempering requirements for induced air supply**

ONCE AGAIN the versatility of warm air heating systems has won a new customer for the industry. This time it's applied to a combination display room, private offices, parts department and repair shop for an automobile agency. The layout described was originally specified by the architect to be heated by a wet heat system. But when

Morton Amidon, of Morton Amidon and Son, heating and air conditioning dealers of Marcellus, N.Y., learned about the specifications, he called upon C. J. Pilot, the owner, and explained that with a warm air heating system and its accompanying ductwork, a warm air system

(Continued on page 144)

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C. John Craig, Manager, Packaged Refrigeration Division
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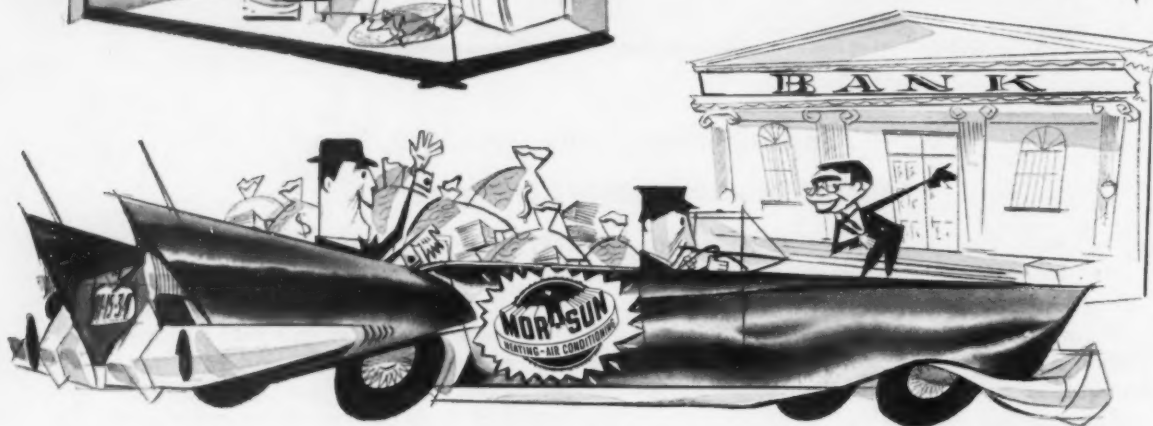
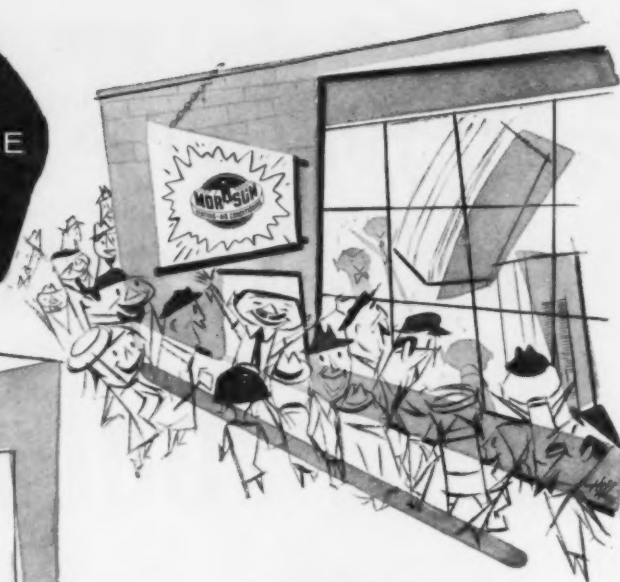
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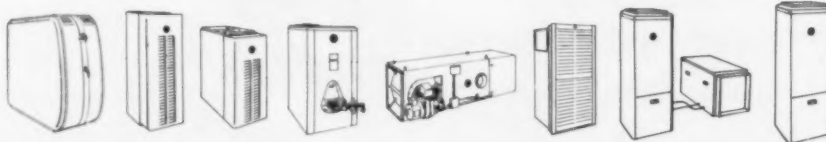
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QUALITY DESIGN AND CONSTRUCTION that ensures customer satisfaction.
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NATIONAL ADVERTISING that pre-sells Mor-Sun, builds customer recognition and acceptance,
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SALES PROMOTIONAL HELPS, selling tools to help you interest the prospect and close the sale.
CO-OP ADVERTISING PLAN for your local use—newspaper, radio, TV, and other approved media.

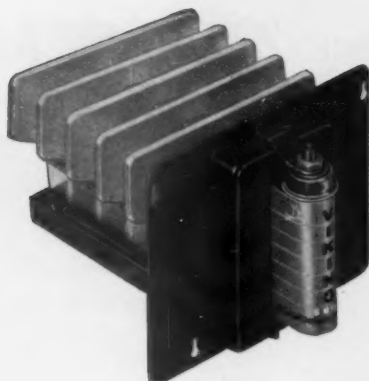
FOR ALL THE DETAILS of one of the soundest business opportunities open to heating dealers, see your nearest Mor-Sun Distributor—he's listed in the Yellow Pages of your telephone directory—or write directly to: Mor-Sun Furnace Division, Morrison Steel Products, Inc., 609 Amherst Street, Buffalo 7, N.Y.

THE COMPLETE LINE



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"5600" AquaMagic Humidifiers by Viking

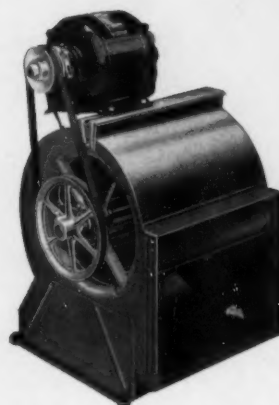
World's only humidifier with a leak-proof
ovenware glass pan. Holds up to 10 evaporator
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home humidifier needs.



Blower Packages by Viking

Five models — two with round and
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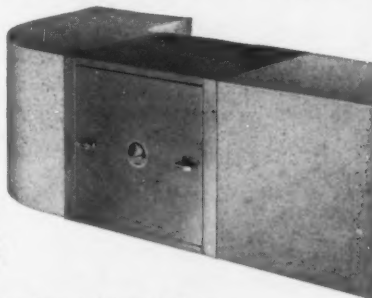
Five capacities for from 75,000
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capacities. Available with
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Duct Blower Packages by Viking



Two exterior cabinet sizes
and six blower capacities from
600 to 3400 CFM available.
You can mount them in any
position for air movement
through heating, ventilating
or cooling ducts.



Auto Showroom and Shop Uses Zoned System

(Continued from page 140)



CHECKING THE DIFFUSER opening is Richard Amidon as C. J. Pilot (left) and Morton Amidon, heating contractor, check the dimensions

could easily be made to accommodate summer cooling equipment at a later date. This was an attraction that caused the specifications to be altered in favor of warm air heating.

Heating Load Is Split

The heating engineer decided to split the heating load, placing the 60 × 100 ft repair shop on its own furnace and air distribution system. The remainder of the building (75 × 60 ft) is located over a full basement (4500 sq ft) and includes the display floor (1440 sq ft), parts department (1660 sq ft) five offices (1070 sq ft) and three washrooms (330 sq ft). He decided to use perimeter heating for the display room because of the large glass area. The remainder of the first floor interior receives its supply of air from ceiling diffusers strategically located to provide adequate diffusion for both winter heating and summer cooling. All ducts were sized to handle the air volume required by summer cooling.

The basement was designed to include a tunneled driveway which enters from the rear. The remainder was to be divided to provide a storage room, a furnace room and a paint shop.

When the heat loss for the two systems was estimated it was found that a 450,000 Btu furnace would be required for each system. Much of the heat load placed on



PERMANENT OPENING in the furnace room will assure the large quantity of air required for proper combustion

the office and showroom system was due to the quantity of outside air needed to replace the air supplied the three washrooms and the paint shop. All the air supplied these areas was exhausted to the outside.

Rectangular ducts were used for all trunk lines, with all branch ductwork made of 5 and 6 in. round duct. The branch ducts were placed between ceiling joists to supply the ceiling diffusers.

The repair shop system utilizes a suspended furnace with a plenum that has six stub ducts discharging air over a 180 deg radius. The blower capacity is sufficient to direct the warmed air to all corners of the repair shop. Return air is picked up at the open back of the furnace.

Furnaces assigned heating jobs such as this must not only have the capacity to offset the maximum heat loss through the walls and ceiling but must also be sized to handle the abnormal infiltration loads that exist because of the large motorized doors at each end of this type of building. The infiltration around the loose fitting doors is great in itself but when the doors are opened, the wind drives thousands of cubic feet of low temperature air into the building. This outside air must be quickly brought up to temperature if satisfactory working conditions are to be maintained.

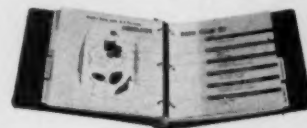
Grilles Play Big Role

At the time the photograph on page 140 of the suspended furnace was taken, the building was not in complete operation and the directional grilles specified for the stub ducts had not yet been installed. However, properly selected grilles are an important part of this type of air distribution. The grilles must be capable of directing air flow at a velocity that will carry the air to the far corners of the shop. The grille must also discharge warmed air in a pattern that will prevent blasts

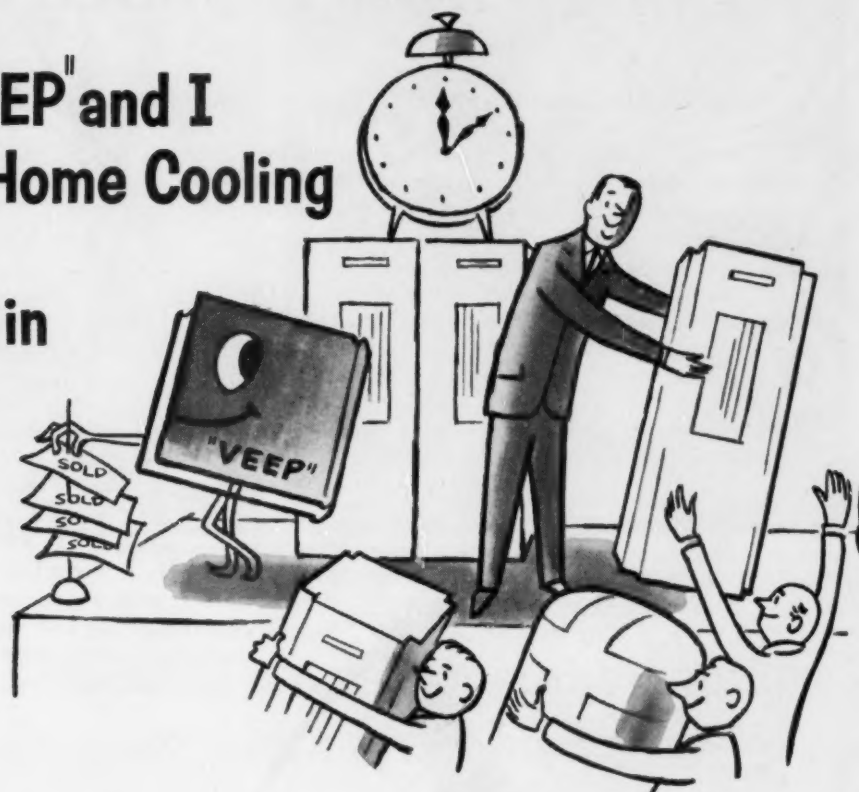
(Continued on page 149)

THE G-E "VEEP" IN ACTION

How new G-E "Magic Sales-Maker" popularly called "The Veep" helps increase sales for G-E Home Heating and Cooling Dealers



How the "VEEP" and I sold 7 G-E Home Cooling units and 4 furnaces in 24 hours!



JOHNNIE AIMONETTE,
L & L Sales, Inc.,
General Electric Dealer
Springfield, Ill.

SOLD! Seven G-E home cooling units and four G-E furnaces between the hours of 5 PM Friday and 5 PM Saturday! Looks pretty much like an all-time record!

Well, that's the score made by Johnnie Aimonette of L & L Sales, Inc., Springfield, Ill. Or rather, as Johnnie puts it, "The 'Veep' and I did it!"

This was the highlight of an amazing 5-month record that Johnnie achieved with the aid of the "Veep." A record of 58 sales of cooling units and 47 heating units between March 1 and July 31, 1955! His leads came from 3 sources—direct mail—advertising (newspaper and radio spots) and assistance from Mrs. "A." But when it came to clinching sales, Johnnie needed only one source of assistance, the "Veep."

"The new 'Veep' definitely helped close these sales," reports Johnnie. "Fact that the story is told mostly in pictures makes it easy to elaborate on my own sales pitch, and still cover all the important, sales-making features."

Watch for more true sales stories like this one—in future G-E advertisements in this publication. They all teach the same lesson—the profit-wise home heating and cooling dealer is the one who has climbed on the G-E Bandwagon. Want to join up?



FREE! Sales Secrets That You Can Use.

Exciting success stories by G-E salesmen tell how they broke sales records with the aid of the "Veep." For your copy write GENERAL ELECTRIC, HOME HEATING AND COOLING DEPT. AA-16, BLOOMFIELD, N. J.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

Home Heating and Cooling Dept., Bloomfield, N. J.

"I shot an arrow into the air,
It fell to earth, I know not where."

The Arrow and the Song—Longfellow, 1845

Longfellow a space buyer?

Longfellow's lament could well have been applied to advertising back in 1845. Yes, even up to 1914 when a group of advertisers, agencies and publishers, alarmed by the waste and guesswork in their business, brought order out of advertising chaos by organizing the Audit Bureau of Circulations. These pioneers in circulation auditing established a definition for paid circulation, rules and standards for measuring circulation, methods for auditing and reporting the FACTS.

For value-minded advertisers the era of blind space buying ended in 1914. ☆ ☆ Today's experienced space buyers use the audited information in A.B.C. reports to aid them in applying media to markets and get full value for advertising dollars. Here are some of the FACTS in

A.B.C. reports that provide a sound basis for advertising investments:

- How much paid circulation • How much unpaid distribution • Occupational or business breakdown of subscribers • Where they are located • How much subscribers pay • Whether or not premiums are used • How many subscribers in arrears • What percentage of subscribers renew.

☆ ☆ Sales messages go direct to their targets, there's no shooting "into the air" when space buyers base their decisions on A.B.C. FACTS. This publication is a member of the Audit Bureau of Circulations because we want our advertisers to know what they get for their money when they use space in these pages. Ask for a copy of our A.B.C. report and then study it.



SEND THE RIGHT MESSAGE TO THE RIGHT PEOPLE

Paid subscriptions and renewals, as defined by A.B.C. standards, indicate an audience that has responded to a publication's editorial appeal. With the interests of readers thus identified, it becomes possible to reach specialized groups effectively with specialized advertising appeals.

A.B.C. REPORTS—FACTS AS A BASIC MEASURE OF ADVERTISING VALUE



NOT THIS! This family's uncomfortable—really uncomfortable. Floors are cold. Ceilings are hot. The whole house is drafty. Temperature's never the same.



BUT THIS! Now, they're constantly comfortable. In tests, Waterbury COMFORTROL heating has shown less than 1° temperature variation from floor to ceiling.

New kind of heating gives constant comfort ...hour after hour after hour

Few things that you can offer prospects will interest them more than *constant* comfort. New Waterbury COMFORTROL By-Pass heating provides comfort morning-noon-and-night.

COMFORTROL *anticipates* outside temperature changes long before they affect comfort. It mixes cool air with warm air to provide the exact temperature called for by outdoor and indoor thermostats. Its continuous supply of clean, fresh humidified air

adds warmth at the same rate as it is lost through walls, windows and attics. There are no drafts, no hot and cold cycles of temperature. In tests with Waterbury COMFORTROL, rooms have shown less than one degree temperature variation from floors to ceilings.

Your prospects choose one unit over another because it is a better value. Increase your unit sales by offering the *constant* comfort of Waterbury COMFORTROL.

Send for FREE booklet: "IT TAKES MORE THAN HEAT TO BE COMFORTABLE"

That's just what Waterbury's new COMFORTROL booklet is all about. Thirty-two pages of facts, illustrated by famous cartoonist Tom Henderson, on the new *kind* of heating that will help you sell more units.



Write: Waterman-Waterbury Co., 1122 N. E. Jackson Street, Minneapolis 13, Minnesota.



Waterbury *Comfortrol*

By the makers of world-famous Waterbury furnaces and air conditioners

DOLLARS say AMERICAN ARTISAN is the BEST READ BOOK in...

Residential Air Conditioning • Warm Air Heating • Sheet Metal Contracting

AMERICAN ARTISAN

Readers of this field-leading book are the KEY dealer-contractors and wholesalers handling 80% of the available business. In no other medium can you reach them "The American Artisan Way." And what is that way? Simply, an outstandingly useful editorial job which attracts and holds PAID subscribers. Every copy is paid for because it's worth it! Here's assurance, backed up by dollars on the line, that American Artisan is wanted, respected, and used. Doesn't it follow that American Artisan is where your advertising effort should be concentrated? Remember, it's the only book in its field that can provide you with a 100% paid circulation.



Keeney Publishing Co.

AIR CONDITIONING HEADQUARTERS

6 N. Michigan, Chicago

NEW YORK: 1734 Grand Central Terminal

CLEVELAND: 737 National City Bank Bldg.

LOS ANGELES: 672 S. Lafayette Park Place

Fan Setting Reduces In-Transit Heat Losses

(Continued from page 144)

of air in certain areas. The grilles for this installation have been selected on an individual basis for each stub duct and will assure proper diffusion of the warmed air with shop air before it reaches the occupied zone. Each grille will have both horizontal and vertical adjustments.

Return Air Ducts Are Optional

Return ductwork is not required for installation where the furnace supplies all its heat to the room in which it is located. However, if the owner of such an installation wanted return ducts, they would have been run along the wall ceiling line and would drop down to pick up the air infiltrating at each of the motorized doors. Such a return duct system would also include an opening directly back of the furnace so air from the center of the building might be recirculated without being drawn toward the door openings.

Large suspended furnaces of the size used in this application (450,000 Btu) use the same type of fan and limit controls as do other installations. The recommended settings for horizontal applications differ from those used for vertical installations because the horizontal furnace usually must incorporate a factory installed auxiliary limit control to compensate for any sudden temperature rise in the heat exchanger due to possible blower motor failure or wiring circuit troubles. On vertically mounted furnaces the natural rise of heat will affect the main control limit quickly enough to protect the equipment; thus, an auxiliary limit control isn't required on the furnace installed for the office portion of the building.

The factory setting of limit controls for horizontal

equipment such as used in this application is 135 deg. The fan adjustment is usually set at 95 deg off and 115 deg on.

The vertical furnace used for the office system has its fan control set for 110 deg off and 125 deg on. This higher setting is used to compensate for the in-transit duct loss.

Furnaces of this heat output frequently use an induced draft blower. Both the horizontal and vertical furnaces in this application used this method of eliminating combustion gases, each for a different reason. The vertical furnace was 80 ft from the chimney. The flue pipe could not be given a graduated slant to the chimney but was run horizontally with the floor joints. To overcome the disadvantages of the level flue pipe, the induced draft blower was installed.

Metal Chimney, Induced Draft Motor Used

The horizontal furnace was located close to the ceiling of the repair shop which used metal roof decking as the foundation for the roof. The installation of a metal chimney was a convenient way to discharge the combustion gases to the outside air. The disadvantage of this installation was the short distance between the furnace flue collar and the top of the chimney. The result of such a short stack meant poor draft control. Thus, an induced draft blower was required to insure a constant draft over the combustion chamber.

The recommended draft setting for both these furnaces was 0.06 in. WG. A damper was incorporated in the blower discharge to obtain this specification.

Porcelain Panels Dress Up Shopping Center

THE TREND TOWARD AIR conditioned one story island type shopping centers has required architects to design the buildings to accommodate the utility and service cores in locations where the equipment is out of sight as much as possible. Where equipment must be placed in full view of patrons, extra effort has been made to decorate the machinery so that it harmonizes with the exterior of the building. The increased use of curtain wall panel construction for this type of disguise is another field where the sheet metal contractor will find a market for his services.

Recent installation of stippled green porcelain enamel panels around a forced draft cooling tower added beauty to the new building designed for a Detroit department store. There were over 1300 sq ft of panels used in this installation.



PORCELAIN ENAMEL PANELS provide decorative wall for forced draft cooling tower

when every penny counts **FIELD** **PERFORMANCE** counts most of all

Accurate, trouble-free draft control is important to every size and type of heating plant, whatever the fuel, whatever the price range. The low budget heating plant can afford faulty control of drafts least of all. And this is why dealers insist that a Field Control be part of every installation—regardless of price range. And today there's a Field Control to fit every heating budget.



FIELD CONTROL DIVISION
of H. D. CONKEY & COMPANY, Mendota, Illinois

Affiliates: CONCO BUILDING PRODUCTS, INC. • Brick, Tile, Stone
CONCO MATERIALS HANDLING DIVISION • Cranes, Hoists

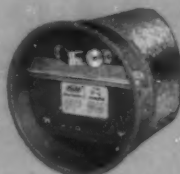
FIELD TYPE "M" for residential and commercial oil or coal fired installations.



FIELD HEAVY DUTY "M" for commercial coal and oil fired installations.



FIELD TYPE "RC" for domestic oil fired installations.



FIELD INCINERATOR CONTROL for gas or fuel-less incinerators.



FIELD TYPE "MG" for commercial and industrial gas and oil-gas fired installations.



FIELD TYPE "G" for domestic gas fired conversion burner installations.



FIELD TYPE "RAA" for space heaters and ranges.



FIELD "SCOTTY" for space heaters and ranges.



[illegible]

Many new drawings—latest information. This new book has the basic construction details previously issued—plus many new drawings and recommendations reflecting current trends in contemporary architecture. All details and specifications embody up-to-date knowledge concerning the use of copper in sheet metal work.

Designed for the Architect, Specification Writer, Sheet Metal Contractor. The book is not a definitive text—but rather a practical guide with clear, brief suggestions for meeting everyday problems—on the drawing board, in specifications, on the job.

ANACONDA® COPPER

The American Brass Company, Waterbury 20, Conn.

Please send me my copy of Publication C-1

NAME.....

COMPANY

STREET

CITY.....ZONE.....STATE.....

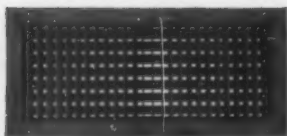
Please check type of business

☐ Architect ☐ Builder ☐ Sheet Metal Contractor

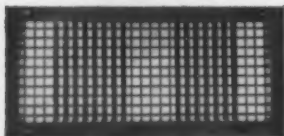
Silvair



... a hard, silver-blue, baked, deluxe finish over prime coat—a quality finish for a quality product — — and job-painting is eliminated.



STYLE DVL



STYLE DDV

And—do you know that —

STEWART outlets provide the industry's maximum free area —

All STEWART register faces are available with Opposed - Action Valves or 1" Parallel - Acting Multivalves at a lower price.

Most STEWART products are available in Stainless Steel—Solid Bronze—All Aluminum.

An inquiry on your letterhead will receive the prompt, courteous attention of a representative.

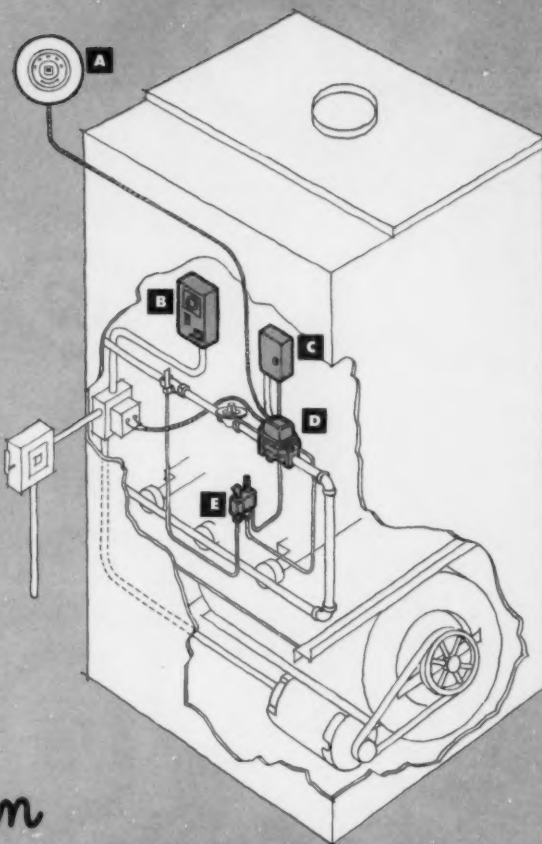


MANUFACTURING COMPANY, INC.

CEDAR GROVE ESSEX COUNTY NEW JERSEY

typical
all-Honeywell
control
system
... for gas-fired
warm air

- A** **Thermostat, T86, the Honeywell Round.** Among manual thermostats, your customers' choice for world-famous styling . . . your best bet for trouble-free accuracy. Sealed mercury switch means no dirty-contact problems. One adjustable heater works with all primary controls.
- B** **Combination Fan and Limit Control, L498D.** See description below.
- C** **Pilotstat, C434,** a reliable, switch-type pilot safeguard. It costs less, it's easy to mount, and its reset button is easy to get at. Use it on furnaces and vented appliances burning street gases. (With LP gases, use C587 or C588.)
- D** **Gas Valve, V87, "New Silent Diaphragm".** Honeywell's new main-burner valve that provides quieter performance at low cost. Suitable for *all* gases.
- E** **Pilot Burner, Q305** a "single-port" pilot . . . the same flame lights the burner and heats the thermocouple which powers the Pilotstat. Less chance for clogging. A low-BTU burner, too . . . saves money for your customers.



Why it's best to use an All-Honeywell Control System



Combination Fan and Limit Control, L498D, new, flat-spiral sensing element permits use of Honeywell's popular L498 on furnaces where space is too small for elements of other models. Controls fan independent of thermostat and provides high limit for burner. In summer, permits manual control of fan for ventilation.

1. Your installation works better

Every Honeywell control is "system-engineered" to work with other Honeywell controls. This gives you maximum system efficiency.

2. You have the widest choice of controls and systems

Only Honeywell makes control systems for every type of heating plant and for all fuels. When you go all-Honeywell, you get the right system for every job. You're able to rely on *one* supplier for all your controls.

3. You get the best field service in the country

Need help in a hook-up? Puzzled by a performance problem? Your best and nearest answer is your Honeywell wholesaler or branch office. 70 years' experience in controls alone . . . plus the biggest field organization of all . . . puts *more control know-how* at your service from Honeywell than anywhere else in the heating industry.

4. You make more money

You spend less time on service calls, more installing new jobs. And jobs are easier to sell when you tell your customer "I use Honeywell controls throughout." The biggest merchandising and advertising program in the industry means that *Honeywell is the control-name your customer already knows.*

MINNEAPOLIS
Honeywell



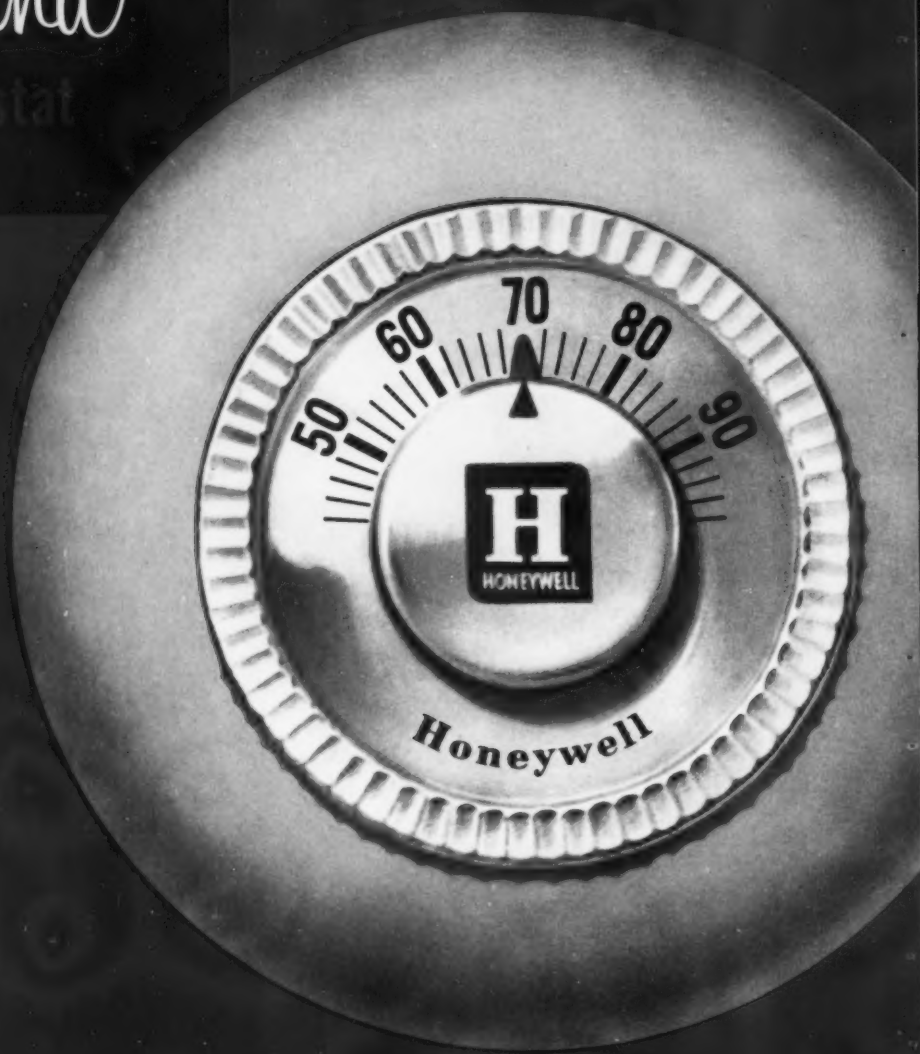
First in Controls

112 OFFICES ACROSS THE NATION

the
Honeywell
Round

thermostat

outmodes all others!



Here's why it's America's largest-selling thermostat...

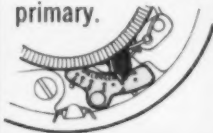


Cover snaps off . . .



for easy painting
to match any wall.

Heater is adjust-
able to match any
primary.



Dust-free mercury
switch gives quick,
positive switching.



H
HONEYWELL



SPECIAL MILL-TREATED SHEETS form readily on standard shop equipment with no peeling or flaking of zinc coating

How to Fabricate Paintable Galvanized Sheets

With development of a tightly adhering coating which permits painting without special treatment comes the question, "How does the coating affect fabricating techniques?" Here are the answers, as applied to standard shop equipment and practices

By W. E. McFee
Armco Steel Corp.

THE OLD GALVANIZED sheet has a new look. Through a newly developed process of continuous zinc coating and related mill-phosphatizing process, galvanized sheet can now be obtained with a coating that adheres tightly in virtually any forming operation a sheet metal shop is called on to do. The mill treated sheet has a phosphate film that takes and holds paint without the necessity of coating a slick, shiny surface with acid.

These sheets can be stored in a clean, dry area with

no adverse effects on their paintable qualities. Water should not be permitted to come in contact with the metal and if possible, the sheets should be stored in a heated room during cold weather. Chemicals such as salts, alkalis and acids should not be used or stored in the same area.

The same brakes or rolls used in forming regular steels into channels, molding and other shapes can be used on the coated sheets. Dies or rolls should be kept clean and polished. When a lubricant is required, use as light a mineral oil as possible.

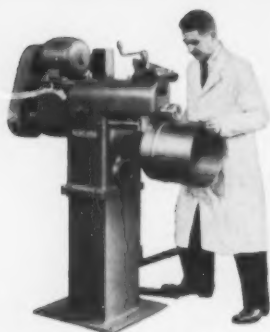
(Continued on page 158)

New Deep Throat Combination Rotary Machine added to versatile, popular Niagara line

**12
MACHINES
IN ONE!**



No. 150 Hand Operated
Deep Throat Combination Machine



No. 180 Power Operated
Deep Throat Combination Machine

Variety of models, versatility, ruggedness, operating ease, low-cost service and modern design have for years made Niagara Rotary Machines *the preferred line.*

And now, the new and improved No. 150 Deep Throat Combination Hand Machine joins the famous Niagara Rotary family.

Truly, it is 12 machines in one. Readily equipped with 12 different pairs of standard rolls (carried in stock), it is without equal for efficient and profitable turning, burring, wiring, elbow edging (3 types), single beading, OG beading, crimping, furnace collar edging, body flanging, slitting and trimming operations. For utmost convenience, work can be fed in either direction with the same, clockwise cranking. *Here's a multi-purpose machine that will turn out real profits for you!*

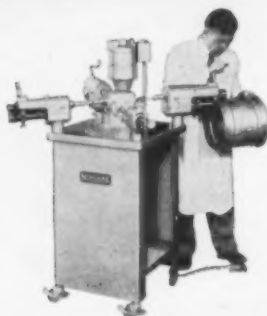
In sheet metal shop or industrial maintenance, Niagara is the Rotary Machine Line that has the most to offer. Power and hand operated models of varied types and work capacities, plus a wide range of forming rolls, make Niagara the only name you need remember to meet *all* your requirements. Write for new Bulletin 75 and the name of the dealer nearest you.

FULL LINE PRESENTED IN COLORFUL NEW BULLETIN 75

Here are 24 pages chock-full of information, including a helpful Selection Chart for picking the right machines and rolls.

NIAGARA MACHINE & TOOL WORKS, BUFFALO 11, N. Y.
DISTRICT OFFICES

Buffalo • Cleveland • Detroit • New York • Philadelphia
Dealers in principal U. S. cities and major foreign countries

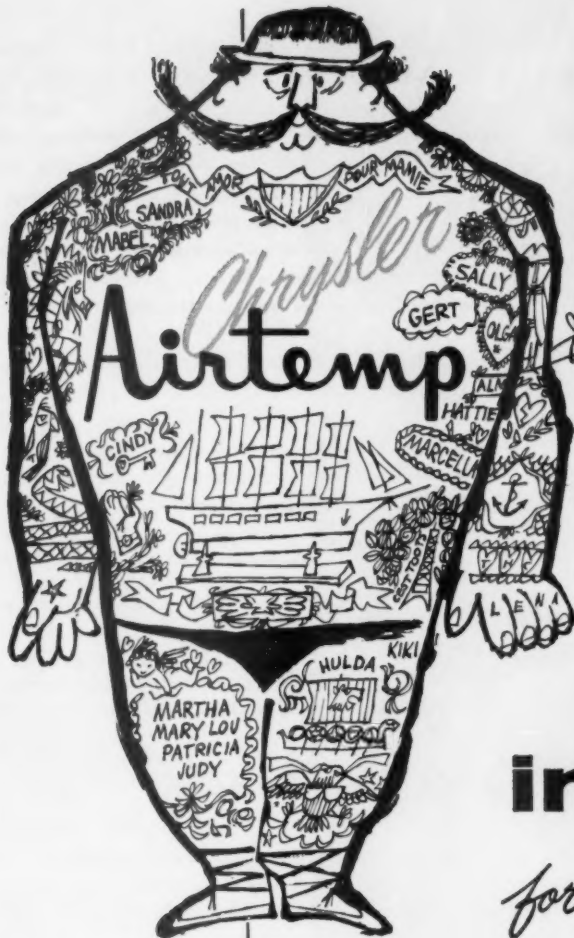


No. 104 Multi-Drive Power Table
for Motorizing Hand Machines

NIAGARA ROTARY MACHINES

POWER AND HAND OPERATED

America's Most Complete Line of Presses, Shears, Machines and Tools for Plate and Sheet Metal Work



Back of Airtemp
is CHRYSLER—
the greatest name
in engineering!

what's in a name?

for you— more sales
of heating and cooling
when it's AIRTEMP by *Chrysler!*

Airtemp residential heating and cooling equipment is built and backed by Airtemp Division of Chrysler—the name people associate with engineering leadership in products of only the highest quality.

With Airtemp, you never have to spend time trying to sell the name . . .
the name *helps you sell* the equipment!

There are many other reasons why the Airtemp Franchise can mean more business for you—in heating *and* cooling.

Get all the facts! Write Department AA-1, Airtemp Division,
Chrysler Corporation, Dayton 1, Ohio.



THE FORWARD LOOK IN

HEATING • AIR CONDITIONING FOR HOMES, BUSINESS, INDUSTRY



How to Weld Paintable Galvanized Sheets

(Continued from page 155)



WHEN BRAZING 12 ga. or lighter sheets, heavy coat of brazing flux is applied to brazing wire and top side of metal. Neutral flame is directed to the rod



METALLIC ELECTRODE is held fairly high above joint to allow zinc fumes to escape. Electrode should be directed about $\frac{3}{8}$ in. ahead of the welded part

Some of the phosphate film may be scraped off in forming, but if it consists only of scratches, the paint will still hold.

However, if the scraped area is relatively large, the best thing to do is apply a touch-up solution at corners and bends. One of the best types of solutions is a commercially available chemical developed for phosphate coating the newer types of zinc coated sheets.

Apply by brushing, wiping or spraying, and let the solution set for at least two minutes. Sponge the treated parts with water and after thoroughly drying, it is ready for the painter.

Because the phosphate film is a poor conductor, higher voltage and more current are required than for spot

welding regular galvanized or special zinc coated sheets.

Use the smallest diameter spot weld possible. Sound, dense welds have been made with a $\frac{3}{16}$ in. diameter spot welding electrode. Apply the highest electrode pressure that doesn't indent the sheet. Satisfactory results have been obtained in welding 24 ga. metal using 250 to 300 lb pressure on the electrode with a $\frac{3}{4}$ in. flat electrode on the bottom and a dome-shaped electrode on top. This practice also will keep finishing costs down if the flat electrode is used on the exposed side of the work.

As is the case with any metallic coated sheet, proper cooling of the spot welding electrode tips cuts weld-tip maintenance pickup on the electrode tips. The coldest possible water or refrigerated brine is preferred.

Generally, machines of these capacities are required for spot welding the stated gages:

Gage No.	Minimum K. V. A.
24	25
20	35
16	50

It is always desirable to use hard copper alloy tips and to keep the electrodes clean with fine emery cloth.

Use Shielded Arc Electrodes

Shielded arc electrodes are a must in metallic arc welding of mill-phosphatized zinc coated sheets.

It is important, too, that the operator be protected from zinc fumes given off by the intense heat of the arc.

Use a stiff wire brush to remove the oxide film from the welded joints. To restore scraped-off areas of the phosphate film, apply the chemical coating solution.

Carbon Arc Brazing Calls for Carbon Electrodes

Carbon arc brazing requires the use of carbon electrodes and a filler rod. Inasmuch as bronze welding filler rods have a relatively low melting point, they are exceptionally well suited for carbon arc brazing of mill-treated zinc coated sheets.

The carbon electrode, which should be of $\frac{5}{32}$ to $\frac{5}{16}$ in. diameter, is used with straight polarity d-c welding current. Size varies with sheet thickness and filler rod diameter. The filler rod is held at a 20 deg angle and the arc applied directly to it. Caution: Do not direct the arc on the sheet because it will burn off the zinc coating. Another method is to lay the filler rod flat on the joint over its entire length. Hold a short arc and follow along the joint, again directing the arc onto the filler rod.

(Continued on page 162)

These six exclusive features have made Purolator PF-2002 Oil Burner Fuel Line Filter the most widely used by original equipment manufacturers in the combustion industry. Here's why:

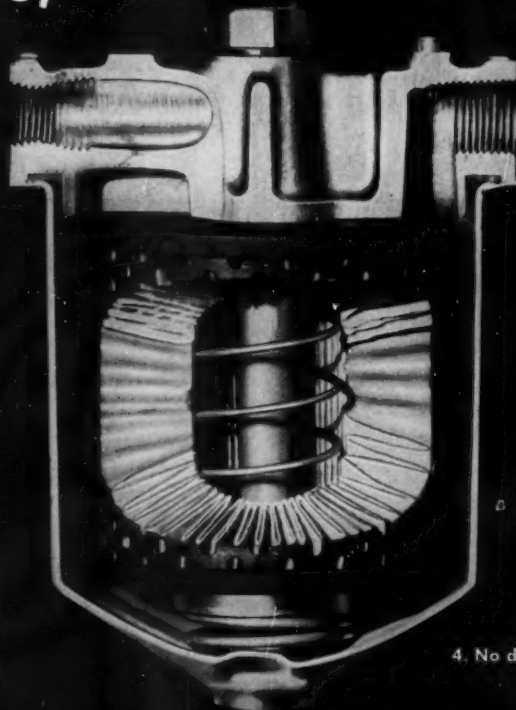
- 1 Purolator's element is waterproof and acid-resistant, holding back sludge-forming water that clogs nozzles.
- 2 The Purolator element is uniformly dense. It is the only medium to provide micronic filtration to .0002.
- 3 This uniform density prevents channeling. There are no "soft spots" for oil to break through easily and thereby minimize filtration.
- 4 Purolator's micronic element will not shrink, distort, stretch, flake, or deteriorate when oil passes through. It will not wear.
- 5 Purolator elements fit most popular filter housings. The necessary gaskets for installation in other housings are included in the Purolator package, for the cost of the element.
- 6 Purolator offers a standard one-sized unit which is physically among the smallest elements available, yet has a capacity three times the largest element sold for domestic burners. This reduces stock and inventory problems.

The Purolator PF-2002 prevents nozzle clogging . . . cuts down fuel pump wear . . . lowers fuel consumption by improving combustion. Write us for further information and prices. Address Purolator Products, Inc., Rahway, New Jersey, Dept. OB3-130

**A FEW ATTRACTIVE DEALER
AND JOBBER TERRITORIES
ARE STILL AVAILABLE**

Remember, the Purolator PF-2002 element fits most popular housings. Stock and inventory problems are reduced—this one Purolator element with adapters is widely interchangeable.

*No other oil burner
filter offers ALL
of these 6 advantages*



1. Waterproof
and acidproof

2. .0002"
filtration

3. No channeling

4. No distortion

5. Element
fits most
popular housings

6. One size fits all jobs

One of them may be in your area. But please send requests for confidential jobber and dealer information on your company letterhead.

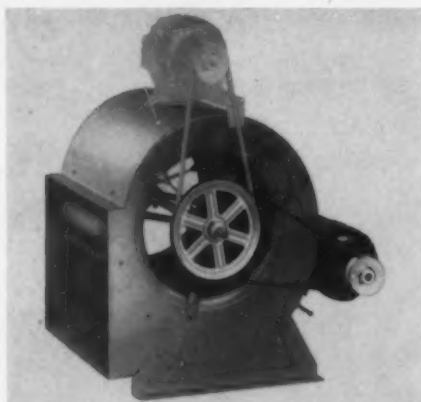


1. Direct Drive or Belt Driven

2. Complete Assemblies or Component Parts

In either case, leading original equipment manufacturers know from experience that

MORRISON BLOWERS...



...Are dependably "top quality" in construction and service.

Morrison Blowers are correctly designed for your individual space requirements, meeting or exceeding all standards for the industry. They are rugged in construction—quiet in operation.

Ask us how many O.E.M.'S
are saving 50% of their
Blower dollar investment.

New Blower catalogs now available.

The wheels are double width, double inlet,
standard diameter. Blades are one piece
construction.

MORRISON PRODUCTS INC.

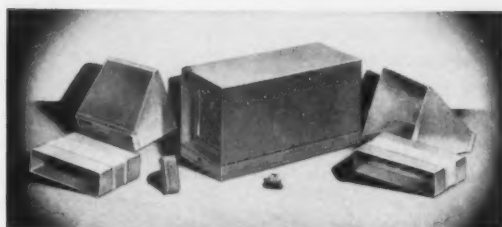
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UNIVERSAL MODEL—installed on or between joists in basement or crawl-space. Flexibility of installation permits baseboard or wall registers.

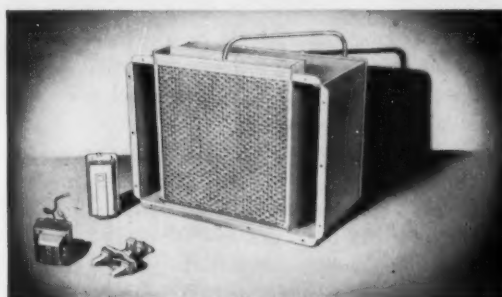
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BY _____

Soldering, Welding Paintable Galvanized Sheets

(Continued from page 158)

Carbon sticks are preferably 1½ to 2 in. long and pointed at the ends. In the second method, only about 50 to 60 amp are necessary for brazing 18 to 20 ga. metal. Wire brush the weld deposit now and then. Finally, touch up large scraped areas with a bonderite solution.

Protect Enveloping Flame

The first rule in oxy-acetylene brazing is to protect the underlying enveloping flame. On 12 ga. and lighter metal, apply a heavy coat of brazing flux to the rod and also to the sheet. Make sure the flux is thoroughly cleaned off before the work is painted.

Direct a neutral flame to the rod—again, not to the metal. The rod should be a fumeless deoxidizing bronze; tin coated rods are not suitable. Make a ripple weld by moving the filler rod backward and forward.

Jaws of the jig should be close to the joint to conduct the heat off and to prevent the torch flame from covering a wide area. A small tip gives best results.

Proper Flux Makes for Good Solder

The key to good soldering practice is proper fluxing. Use a special soldering flux or a mixture of cut acid, raw acid, denatured alcohol and water. Raw acid is not recommended; neither are pastes, although some acid-

cored solders may be adapted for use on phosphatized zinc coated sheets. There is a soldering flux available which is recommended for soldering sheets with "paint grip" and "zinc grip" coatings.

Tin-lead solder can be in the following ratios of tin to lead: 40-60, 50-50 or 60-40. The higher the tin content (up to 63 per cent) the stronger the soldered joint and the brighter and more shock resistant it will be.

If the paint job is to be satisfactory, all flux must be removed by thorough washing with clean water.

Coating the metallic arc welded joints by soldering or metal spraying produces a good looking job and assures high protection against corrosion. Another method is to apply a commercial galvanize coating powder and heat after welding.

The weld must be clean before coating. Wire brushing will do it. Level or smooth out the solder on each side of the weld so it overlaps the coating edges on both sides of the joint.

Surface condition of the joint has much to do with metal spraying. Clean off dirt, scale and rust before spraying. Manufacturers of metal spraying equipment will provide information on correct practice.

A commercially available special fluxed zinc powder is either sprinkled on the weld or mixed with water and applied as a thick paste. Heat the joint from either side with an oxy-acetylene torch until the zinc melts. When wiped in a molten state, it will form a smooth coating.

How and When to Use Powered Abrasive Wheels

CUTTING FERROUS AND NONFERROUS metals can be a costly problem for the sheet metal contractor. The use of an abrasive cut-off machine is providing one way of reducing costs for cutting metal roof deck, angle iron and other metals unsuited for the power shear.

The proper use of the cut-off machine often lies in the choice of abrasive wheels. For cutting hard materials, a soft grade of wheel is used; hard materials tend to dull the wheel grits more rapidly. Soft bonded grits tear away to expose other sharp grits which continue to perform the cutting operation.

In cutting ferrous metals, best results are achieved by feeding the abrasive wheel into the work as fast as possible. Feeding pressure should be applied steadily after the wheel is in contact with the work but not to the extent that the wheel is slowed considerably. The faster the wheel is fed the greater is its life.

Burrs on the work are often a problem in metal cutting with abrasive wheels. In cutting hard materials, burrs present no great problem, and any that do occur are hard and brittle, which makes them easy to remove by scraping with a course file. When cutting soft materials,

an abrasive wheel has a greater tendency to create a burr which is sometimes difficult to remove due to the ductility of the metal. This problem can be reduced and in some cases eliminated by using a softer grade wheel.

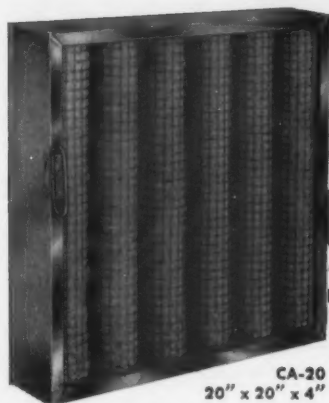
Wet cutting is often the answer to problems created when cutting high carbon steels that are to be filed or polished during the fabricating process. The heat created by the cutting wheel causes work hardening of the edges. This is minimized by the heat removing fluid used in wet cutting.

While copper, brass, aluminum and other nonferrous metals can be cut with abrasive wheels, tests indicate it is often more advantageous to use a high speed metal cutting steel saw blade in the cut-off machine. Such cutting blades should be made of high speed steel or of special high carbon, high alloy steel of low filing temper. These blades should also be hollow ground for good clearances.

The saw blades are designed to run at a speed of 2000 rpm. At this speed burrs on nonferrous metals are practically eliminated.



TYPE DY
1" THICK
STANDARD SIZE



CA-20
20" x 20" x 4"



CA-24
24" x 24" x 8"

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For more exacting air-cleaning needs, CA-20 and CA-24 DYCON filters are indicated.



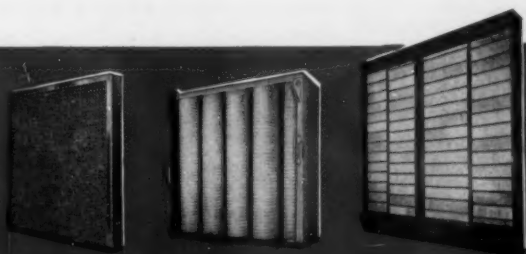
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Housing Census Heating Data

Lancaster, Pa. • Orlando, Fla. • Saginaw, Mich. • San Antonio, Tex. • Wheeling, W. Va.

SUGGESTIONS on how a warm air heating dealer can use some of the housing data available from the Bureau of Census were given in the November 1954 American Artisan. Localities covered in the reports are metropolitan

areas that are socially and economically integrated with the central city. Data for various areas has been reported regularly in American Artisan since May 1953. Additional reports will continue to appear regularly.

Types of Fuel Used in Centrally Heated Dwelling Units

	Standard Metropolitan Areas									
	Lancaster, Pa.	Orlando, Fla.	Saginaw, Mich.	San Antonio, Tex.						
	Lancaster County	Orange County	Saginaw County	Bexar County	The Area	Brooke County	Hancock County	Marshall County	Ohio County	Belmont County, Ohio
All dwelling units	67,376	40,212	44,491	137,853	103,644	7,422	9,330	10,742	21,912	26,700
Number reporting heating equipment	64,665	33,155	42,520	126,745	99,435	7,240	9,205	10,075	21,135	25,095
Central heating	45,140	4,500	22,520	17,615	58,465	5,035	6,780	3,735	10,745	13,760
Coal	30,190	135	13,935	290	42,220	3,805	4,710	2,245	5,510	11,270
Wood	210	225	335	255	165	20	15	5	5	55
Utility gas	1,365	1,000	4,690	15,990	14,305	1,120	1,900	1,450	5,020	1,995
Bottled gas	200	205	100	700	180	15	20	10	30	60
Liquid fuel	12,140	2,480	3,145	150	425	30	20	5	40	90
Other fuel	800	365	215	145	885	20	70	10	85	215
Not reporting	235	90	100	85	285	25	45	10	55	75

Types of Nonfarm Dwelling Units, by Type of Heating and Year Built

	Total occupied					Owner occupied					Renter occupied				
	Total	1 dwelling unit, detached	Other 1, and 2 dwelling unit	3 and 4 dwelling unit	5 to 9 dwelling unit	10 dwelling unit or more	Total	1 dwelling unit, detached	All other dwelling units		Total	1 dwelling unit, detached	Other 1, and 2 dwelling unit	3 and 4 dwelling unit	5 to 9 dwelling unit
Standard Metropolitan Area of Lancaster, Pa. — Lancaster County															
All occupied units	53,760	21,895	25,945	3,610	1,810	500	31,530	16,315	15,015	22,230	5,380	11,680	3,035	1,685	450
HEATING EQUIPMENT															
Central heating	38,012	14,758	18,160	3,039	1,629	426	25,049	12,334	12,715	12,963	2,424	6,051	2,592	1,504	392
Piped steam or hot water	20,914	9,203	7,151	2,622	1,549	389	13,910	7,700	6,210	7,004	1,503	1,445	2,260	1,424	372
Warm air furnace	17,098	5,555	11,009	417	80	37	11,139	4,634	6,505	5,959	921	4,606	332	80	20
Noncentral heating, with flue	13,222	5,998	6,599	505	100	20	5,311	3,453	1,858	7,911	2,545	4,847	399	100	20
Nonctrl. htng., without flue; or not htd.	1,882	724	993	65	80	20	700	409	291	1,182	315	723	44	80	20
Not reported	647	415	195	...	...	37	470	318	152	177	97	60	...	...	20
YEAR BUILT															
1945 or later	4,362	3,460	841	26	...	35	3,481	2,919	562	881	541	279	26	...	35
1940 to 1944	1,785	1,351	402	...	32	...	1,360	1,135	225	425	216	177	...	32	...
1939 or earlier	46,900	16,733	24,409	3,532	1,778	448	26,289	12,218	14,071	20,611	4,315	11,071	2,957	1,653	415
Not reported	712	351	292	52	...	17	400	243	157	312	108	152	52	...	...

Standard Metropolitan Area of Orlando, Fla. — Orange County

All occupied units	34,200	26,355	4,240	1,945	1,235	425	20,935	19,420	1,515	13,265	6,935	3,160	1,610	1,165	395
HEATING EQUIPMENT															
Central heating	4,886	3,680	550	298	170	188	3,553	3,259	294	1,333	421	383	181	170	178
Piped steam or hot water	773	349	162	68	85	109	338	286	52	435	63	120	68	85	99
Warm air furnace	4,113	3,331	388	230	85	79	3,215	2,973	242	898	358	263	113	85	79
Noncentral heating, with flue	16,341	13,770	1,740	539	233	59	11,110	10,460	650	5,231	3,310	1,221	408	233	59
Nonctrl. htng., without flue; or not htd.	12,357	8,518	1,858	1,062	741	178	5,942	5,461	481	6,415	3,057	1,484	975	741	158
Not reported	549	390	93	45	21	...	263	242	21	286	148	72	45	21	...
YEAR BUILT															
1945 or later	10,765	9,614	869	53	163	66	7,984	7,768	216	2,781	1,846	653	53	163	66
1940 to 1944	3,440	2,861	235	158	186	...	2,281	2,281	...	1,159	580	235	158	186	...
1939 or earlier	19,275	13,505	2,900	1,655	886	329	10,449	9,207	1,242	8,826	4,298	2,063	1,320	816	329
Not reported	689	374	236	79	190	163	27	499	211	209	79

(Continued on page 168)

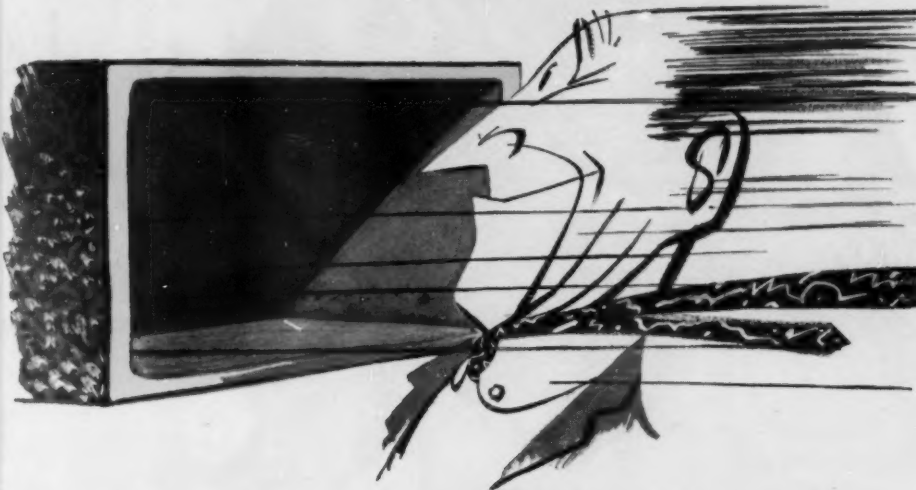
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Spark buying action with a proven power-packed program! Hard-hitting, national consumer advertising—special sales-training manuals—cooperative exhibit program—full store and on-the-job dealer identifications—special Modernization Sales Promotion Kit . . . plus many other tested sales "go-getters". Everything you need to alert *more* prospects . . . close *more* sales.



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All prospects want the feeling of positive protection for their investment. They'll buy faster and more confidently from *you* when you offer the plus values of Thatcher equipment . . . backed by Thatcher's 10-Year Guarantee on all warm air conditioners. It's *one* of the many sales features that continue to give Thatcher wholesalers and dealers that extra edge on competition!



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Thatcher has been geared to consider your sales problems individually . . . to work with you on the special needs of your market . . . and to provide fast action in every situation. Also, the combined backgrounds of Thatcher's key people offer an excellent fund of important information. Only this kind of *close, personal* relationship can properly advance your interests . . . add to your success!



Get The Jump On Competition Today!
Make your move now . . . write to Thatcher Furnace Company, Garwood, New Jersey. Complete information will be sent to you immediately.



Housing Census Heating Data

(Continued from page 164)

Types of Nonfarm Dwelling Units, by Type of Heating and Year Built

	Total occupied						Owner occupied			Renter occupied					
	Total	1 dwelling unit, detached	Other 1, and 2 dwelling unit	3 and 4 dwelling unit	5 to 9 dwelling unit	10 dwelling unit or more	Total	1 dwelling unit, detached	All other dwelling units	Total	1 dwelling unit, detached	Other 1, and 2 dwelling unit	3 and 4 dwelling unit	5 to 9 dwelling unit	10 dwelling unit or more
Standard Metropolitan Area of Saginaw, Mich. — Saginaw County															
All occupied units	36,610	27,450	4,680	2,490	1,355	635	25,445	23,130	2,315	11,165	4,320	2,900	2,020	1,300	625
HEATING EQUIPMENT															
Central heating	19,600	14,413	2,559	1,310	832	486	14,035	12,579	1,456	5,565	1,834	1,533	927	795	476
Piped steam or hot water	5,080	2,842	718	610	424	486	2,859	2,357	502	2,221	485	383	453	424	476
Warm air furnace	14,520	11,571	1,841	700	408	...	11,176	10,222	954	3,344	1,349	1,150	474	371	...
Noncentral heating, with flue	14,989	11,581	1,850	973	496	89	10,228	9,495	733	4,761	2,086	1,222	886	478	89
Nonctrl. htng., without flue; or not htd.	1,433	1,064	177	165	27	...	832	727	105	601	337	72	165	27	...
Not reported	587	393	93	41	...	60	351	330	21	236	63	72	41	...	60
YEAR BUILT															
1945 or later	3,679	3,492	50	28	28	81	3,116	3,116	...	563	376	50	28	28	81
1940 to 1944	2,309	1,889	165	114	141	...	1,789	1,674	115	520	215	50	114	141	...
1939 or earlier	29,630	21,332	4,391	2,262	1,101	544	20,115	17,925	2,190	9,515	3,407	2,726	1,792	1,046	544
Not reported	978	754	74	85	85	...	412	412	...	566	322	74	85	85	...
Standard Metropolitan Area of San Antonio, Tex. — Bexar County															
All occupied units	125,000	90,060	18,725	8,375	5,970	1,870	71,215	64,875	6,340	53,785	25,185	13,855	7,305	5,670	1,770
HEATING EQUIPMENT															
Central heating	16,181	11,342	2,567	1,101	617	554	9,783	9,045	738	6,398	2,297	2,011	919	617	554
Piped steam or hot water	8,063	5,062	1,482	740	457	322	4,402	3,987	415	3,661	1,075	1,171	636	457	322
Warm air furnace	8,118	6,280	1,085	361	160	232	5,381	5,058	323	2,737	1,222	840	283	160	232
Noncentral heating, with flue	21,498	15,575	2,834	1,217	1,727	145	11,721	10,686	1,035	9,777	4,889	2,011	1,060	1,692	125
Nonctrl. htng., without flue; or not htd.	82,921	60,091	12,748	5,690	3,402	990	47,328	43,041	4,287	35,593	17,050	9,368	5,090	3,155	930
Not reported	4,391	3,044	575	367	224	181	2,376	2,096	280	2,015	948	464	236	206	161
YEAR BUILT															
1945 or later	26,148	23,716	1,446	558	292	136	19,904	19,578	326	6,244	4,138	1,120	558	292	136
1940 to 1944	13,733	9,890	1,308	761	1,320	54	8,535	8,014	521	5,198	1,876	1,042	736	1,490	54
1939 or earlier	82,041	54,530	15,030	6,854	3,981	1,646	41,527	36,214	5,313	40,514	18,316	11,069	5,809	3,741	1,579
Not reported	3,074	1,920	742	203	176	33	1,245	1,065	180	1,829	855	625	203	146	...
Standard Metropolitan Area of Wheeling, W. Va. and Steubenville, O. — Brooke, Hancock, Marshall and Ohio Counties, W.Va. also Belmont and Jefferson Counties, Ohio															
All occupied units	90,710	58,585	22,360	6,915	2,005	845	50,950	42,700	8,250	39,760	15,885	15,395	5,810	1,895	775
HEATING EQUIPMENT															
Central heating	53,231	36,878	11,936	3,066	873	478	35,502	30,447	5,055	17,729	6,431	7,603	2,441	829	425
Piped steam or hot water	7,012	3,906	1,307	601	345	453	3,613	2,939	674	3,399	967	990	497	545	400
Warm air furnace	46,219	32,972	10,429	2,465	328	25	31,889	27,508	4,381	14,330	5,464	6,613	1,944	284	25
Noncentral heating, with flue	26,944	16,924	6,947	2,415	565	95	11,629	9,551	2,078	15,315	7,373	5,244	2,102	521	75
Nonctrl. htng., without flue; or not htd.	9,296	4,065	3,092	1,321	543	275	3,105	2,204	901	6,191	1,861	2,359	1,175	521	275
Not reported	1,234	715	384	111	24	...	712	497	215	522	218	190	90	24	...
YEAR BUILT															
1945 or later	5,216	4,831	358	27	...	...	4,153	3,935	218	1,063	896	140	27	...	...
1940 to 1944	3,744	3,081	222	...	247	194	2,847	2,765	82	897	316	140	...	247	194
1939 or earlier	79,614	49,187	21,358	6,743	1,673	651	42,903	35,069	7,834	36,711	14,118	14,747	5,700	1,565	581
Not reported	2,128	1,484	419	143	82	...	1,046	931	115	1,082	553	365	82	82	...

THIS INFORMATION COMES TO YOU . . .

...from statistics compiled by the Bureau of the Census and is extracted from the overall housing picture to supply the heating dealer with useful facts which tell the heating story from the standpoint of market possibilities in his immediate area. The series, which began in the May, 1953 American Artisan and will be concluded in March, 1956, covers 152 standard metropolitan areas. Defined by the Census Bureau as including a county or

group of contiguous counties which contains at least one city of 50,000 inhabitants or more, a metropolitan area could also be described as a marketing area. All localities qualified by the definition are covered in this series of tables and represent a complete picture of the nation's market centers.

Tear sheets for any locality are available from our editorial offices on request.

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Whatever type home installation you are making, you can increase your profits by using WILLIAMSON pre-fabricated duct, pipe and fittings. It's the most comprehensive line offered . . . designed to make your jobs faster and easier, yet maintaining the high tailor-made standards you have established. WILLIAMSON, *first* in the industry with a combined line . . . for both cooling and heating . . . assures you the most modern duct, pipe and fittings available. Check the numerous WILLIAMSON advantages . . . then act today for pre-fabricated profits!

Compare . . .

SIMPLIFIED DESIGNING AND ORDERING—Every system part numbered for quick identification. Factory forms and sample plans for guidance.

SPEED SHIPPING, CUT UNLOAD AND LOAD TIME—Everything you need from *one* source Com-packed for individual job. No loose fittings. Easy identification.

SAVE WAREHOUSE SPACE AND INVENTORY TIME—Cartons standard size for simple stacking. Marked at factory for identification without opening.

PROTECT FROM DIRT, DAMAGE AND DISTORTION—No loose fittings. Sturdy cartons keep all parts in shape . . . in transit or in warehouse. Perfect fit assured.

TRANSFORM SHOP TIME INTO FIELD TIME—Minimum time in shop. Keep more jobs going at same time for faster turn-over. No painstaking cutting required.

PERMIT FASTER, EASIER INSTALLATION—Inexperienced men can do basic layout. Experienced craftsmen finish job. Save as much as 8 hours on average job.

ACCURATE COST ESTIMATE, ASSURED PROFIT—Insure healthy profit margin. Know costs *before* you bid. No chance for losses during installation.

STREAMLINED TAILOR-MADE SMOOTH LOOK—With *your* final touch, match the finest tailor-made jobs. Parts engineered for low friction, perfect fit.



The Space-Wasting Way



The WILLIAMSON Way



More profits from less time and less cash is just what I need. Rush me information on PRE-FABRICATED PIPE & FITTINGS PROFITS today.

- ☐ Send me FREE Pipe and Fittings Catalog
- ☐ Have a WILLIAMSON representative visit me
- Send me information on:
- ☐ Heating Equipment ☐ Cooling Equipment

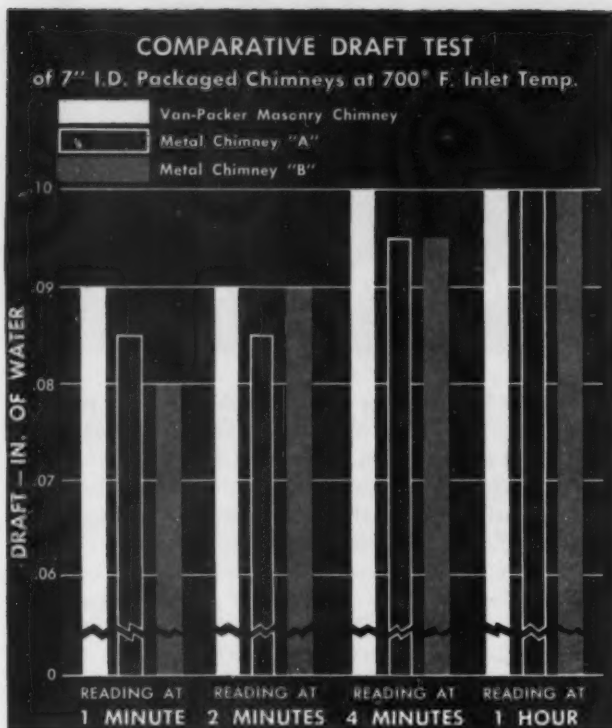
THE WILLIAMSON CO., 3310 E-1 Madison Rd., Cincinnati 9, Ohio

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____



Van-Packer Chimney gives you highest draft for best furnace operation

Highest efficiency — Van-Packer Packaged Masonry Chimney is guaranteed to produce more draft than any other chimney or flue of same size and height. Your heating installation operates best!

Furnace service call-backs cut by Van-Packer's greater draft. Quiet — won't transmit furnace noises or rattles. Cement-asbestos brick-panel housing won't dent or rust.

Safe, permanent masonry — Van-Packer Chimney is UL listed for all fuels, all home heating plants and incinerators; approved by major building codes.

Independent laboratory tests prove Van-Packer Chimney reaches maximum draft in 4 minutes. In test at 300° F., Van-Packer Chimney maintained higher draft and showed less cooling (more potential draft for next furnace cycle).

Product Information

24" SECTIONS AND 12" SECTIONS COMBINE FOR ANY HEIGHT

14" O. D. SECTIONS INSTALL BETWEEN JOISTS 16" O.C. WITHOUT JOIST CUTTING

SECTION JOINTS PERMANENTLY SEALED WITH ACID-PROOF CEMENT

ALUMINUM DRAWBAND REINFORCES EACH SECTION JOINT

SUPPORT ASSEMBLY HAS 4X SAFETY FACTOR—ELIMINATES PIER

DELUXE HOUSING CAP ASSEMBLY

CEMENT-ASBESTOS BRICK-PANEL HOUSING—IN RED, BUFF OR WHITE

ADJUSTABLE ALUMINUM FLASHING

7" I.D. FLUE SECTIONS OF 5/8" FIRE CLAY TILE LINER, 3" VERMICULITE CONCRETE INSULATING WALL, CEMENT-ASBESTOS JACKET

STAINLESS STEEL STANDARD SMOKE PIPE THIMBLE TO CONNECT FURNACE, WATER HEATER, INCINERATOR

Typical Installations

CEILING SUSPENDED

One or Two Story No Basement

CEILING SUSPENDED

Cabin, Garage, Farm or Railroad Building

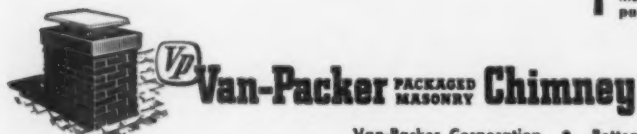
PIER FOUNDATION SUPPORTED

One or Two Story with Basement

FLOOR SUSPENDED

One or Two Story with Basement

To order, or for prices, give your Van-Packer jobber "H-and-L" or "H-and-P" measurements as indicated above. See "Chimneys — Prefabricated" in yellow pages of classified phone book.



For full facts, write for Bulletin RS-1-11

Van-Packer Corporation • Bettendorf, Iowa • Phone: Davenport 5-2621

Patten



V-5000 OIL



V-5000 GAS



V-5000C OIL



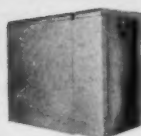
V-5000C GAS



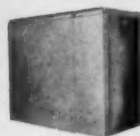
G-6000 GRAVITY



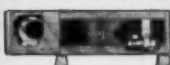
H-5000 GAS



H-2000 OIL



H-5000 OIL



S-5000
HORIZONTAL



COMBINATION
HEATING & COOLING

HEATING — COOLING UNITS

You'll find closing sales a cinch with SUN Fuel-Master winter and summer air conditioners. It's a complete line . . . high-boys, lo-boys, counterflows, conversion burners, air conditioners, suspended units . . . all from one convenient source, and all designed for quicker, lower-cost installations. Even more important, *it's a line priced right for competitive selling.* Why not find out all about this profitable line now!

20-YEAR WARRANTY ON HEATING UNITS
5-YEAR WARRANTY ON COOLING UNITS



OIL OR GAS HEATING IN COMBINATION WITH WATER OR AIR COOLING — DESIGNED TO FIT THE WIDEST POSSIBLE RANGE OF APPLICATIONS.

Sheet Metal Apprenticeship Over—

33 Attain Journeyman Status

Having completed a rigid five year training program, new craftsmen are told of responsibilities ahead



THIS IS THE TEAM that assures the perpetuation of the skills of the sheet metal trade — contractor, instructor, union representative and apprentice. From left are the instructor, John J. Portle; the union representative Joseph J. Kaberlein; the apprentice, Thomas J. Roach; and the contractor, E. B. Brown, Jr.



JOINT APPRENTICESHIP COMMITTEE for Cook and Lake Counties, Ill. is comprised of (seated, from left) Theodore Sohn, Joseph J. Kaberlein, James T. Tracy, William Magerstaedt, Reginald E. Gotham, Shannon J. Troutman, Frank A. Wietzke, Barney Sanders. Standing, from left are Richard Mansfield, Edgar W. Nelson, Edward Stahler, A. Hochschulz, E. B. Brown, Jr., O. A. Wendt, J. E. McClellan and Robert P. Johnson

THE SECOND ANNIVERSARY graduation exercises for Chicago area sheet metal apprentices was held November 10. The rigid five year training program turned out 33 new journeymen. The traditional observance is one way the Joint Apprenticeship Committee for the sheet metal trade in Cook and Lake counties, Ill., show their interest in perpetuating the skills of this trade. Industry groups sharing this responsibility are: Ventilating and Air Conditioning Contractors' Assn. of Chicago; Sheet Metal Contractors' Assn. of Cook County; Air Conditioning Contractors' Alliance; Blow Pipe and Duct Control Industry of Chicago; Sheet Metal Workers' International Assn., Local No. 73; U. S. Dept. of Labor; Bureau of Apprenticeship Training; and Washburne Trade School. William Magerstaedt is chairman and James T. Tracy, secretary.

Apprentice Voices Appreciation

The pride and interest shown by all members of the above groups was summed up by one of the graduating apprentices, who said to this reporter: "The journeymen and officers of the company I worked for have always gone out of their way to help me learn this trade. I feel my five years of training have given me something that will assure me a good living the rest of my life."

In his opening address, Secretary James T. Tracy pointed out that the sheet metal industry is a growing one and that the apprenticeship training program should

be expanded to encourage more young men to consider understudying the skilled journeymen now in the trade. He pointed out that since the 1954 graduating exercises 32 skilled journeymen of the Chicago area had died or retired and that the years of experience lost can hardly be replaced by the 33 new journeymen added.

Training Program Is Industry's Main Asset

Mr. Tracy outlined the growth of the air conditioning field, especially the residential portion, and pointed out the need for more trained men who have received instruction in this rapidly developing industry. He emphasized the recognition contractors have attached to the training program, stating that the money spent in developing the skills of an apprentice produced a good craftsman and that the public acceptance of a trade depends upon the level of the skill displayed by its craftsmen.

The standing of the sheet metal trade in the Chicago area was described by H. Mayne Stanton, executive secretary, Building Construction Employers' Assn. of Chicago, who said: "Chicago is considered throughout the United States as the finest city in the country in which to do construction work. This reputation is due to the fine understanding and cooperation among the members of the Joint Conference Board, which consists of 8 union and 8 employer's representatives. The industry has no greater asset than its apprenticeship program."



you don't need this many arms...

TO INSTALL AUER *"Perfusaire"*

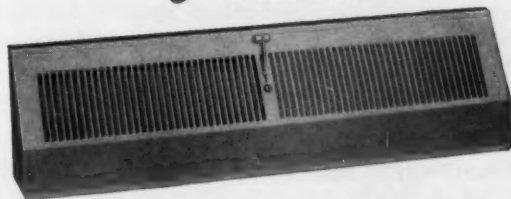
TRADE-MARK

Sheet metal contractors everywhere are discovering amazing savings in time, labor and costs by using Auer "Perfusaire" perimeter registers. They have found that installation time is cut in half!

Perfusaire, designed for use in or against plastered walls, inside or outside the baseboard, installs quickly . . . easily . . . without cutting or fitting. It hugs the wall without unsightly gaps . . . eliminates use of fillers or moldings. It is the answer to difficult uneven wall installations!

The Auer Perfusaire is equipped with a built-in damper to provide positive, controlled system balancing, making it ideal for heating and combination heating-cooling perimeter systems.

For complete details on how you can minimize installation time and increase profits with Perfusaire, ask for Bulletin P-54.



Auer "Perfusaire"—the 18 inch perimeter diffuser that has the capacity of 4 to 8 foot units for heating and heating-cooling combination systems.



Auer DRP floor perimeter registers with built in dampers. Available in 2¼ x 14 inch size and in sizes 4 and 6 inches wide, 10, 12 and 14 inches long.

Auer

REGISTERS
and GRILLES

THE AUER REGISTER COMPANY

"REGISTERS AND GRILLES FOR EVERY HEATING AND COOLING NEED"

6602 CLEMENT AVENUE • CLEVELAND 5, OHIO

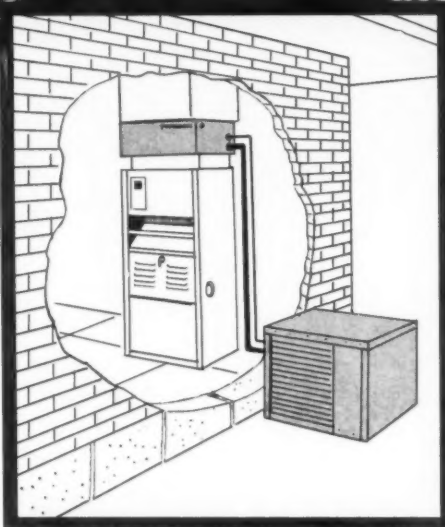
WATERLESS TYPHOON CONVERT-TO-COOL



SELL WARM AIR FURNACE OWNERS ON YEAR-ROUND AIR-CONDITIONING

Every warm air furnace is half an air conditioning system — so the sale is half made before you start. In fact, your own file of warm air installations is a ready-made prospect list for Typhoon Convert-to-Cool. Just show 'em how to enjoy year-round comfort for hundreds of dollars less than they ever expected to spend! And there's never a water problem with Typhoon — air-cooled units, backed by 46 years of engineering experience.

Simple, efficient operation Typhoon cooling coil goes on top of furnace and connects into present ducts. Compact refrigerating unit (only 3 feet square) is located at convenient spot outside the living area. Works on electricity alone. Air cooled — no water supply problem, no drainage problem, no plumbing, no sewer tax.



**IDEAL FOR ATTIC FURNACES, LO BOY
AND COUNTERFLOW FURNACES**

2-3-5-8-10 TON UNITS



*Specialists in Air Conditioning
Since 1909*

SEND IN THE COUPON NOW!

Typhoon Air Conditioning Co., Inc.
505 Carroll St., Brooklyn 15, N. Y.

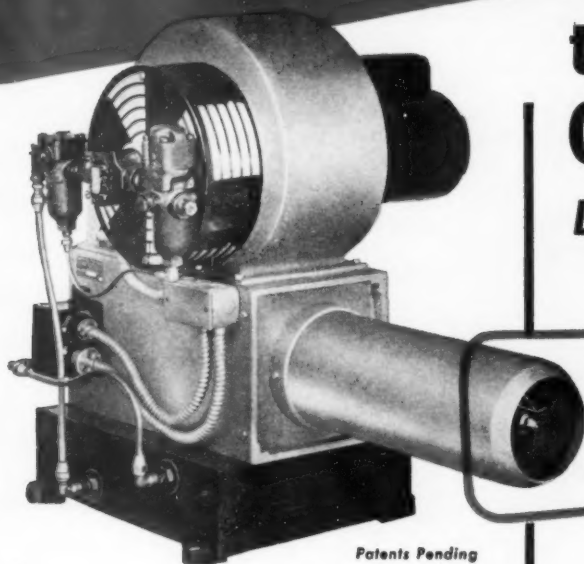
Show me how I can make money with Typhoon Convert-to-Cool.
Send me Bulletin R-2

Name _____

Address _____

City _____ Zone _____ State _____

**BIG SAVINGS YOUR CUSTOMERS
WILL CERTAINLY WANT**



Patents Pending

the *NEW* #4 OIL BURNER DRASTICALLY CUTS FUEL COSTS

**Converts #4 (and #5)
Oil to Burn Efficiently
as #2 Oil.**

- ✓ **APPROVED** for #4 fuel oil by Underwriters' Laboratories, Inc., and by the Board of Standards and Appeals of the City of New York.
- ✓ **BEST BET** for cutting fuel bills in apartment houses, schools, institutions, commercial and industrial buildings and heating processes by using lower priced fuel oil.
- ✓ **AUTOMATIC** — Electric fuel converter system, complete with safety shut-down and mechanical oil cut-off, is thermostatically controlled — automatically. Complete assembly easily accessible for quick service.

- Built-in "Thermax" Converters Reduce Heavy Oil to Light Oil
- As Quiet as a #2 Oil Burner
- Easy to Install and Service
- No Complicated Parts
- Can Use Existing Piping in Practically All Cases
- 3 Sizes—3 to 20 G.P.H. Larger Sizes Available Later

Write for Bulletin and Prices

*Inquiries Invited from
Boiler and Furnace Manufacturers*

SUN-RAY — FAMOUS THE WORLD OVER FOR QUALITY AND ECONOMY



Models for Every Heating Need in Sizes from 0.5 to 22 g.p.h.

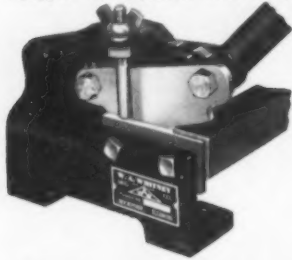
SUN-RAY BURNER MANUFACTURING CORPORATION

139-34 Queens Boulevard, Jamaica 35, New York

Distributed in Quebec and the Maritime Provinces of Canada by Economic Oil Burner Co., Ltd., 5721 St. Denis St., Montreal, Que.

CHICAGO STEEL SLITTING SHEAR

For slitting long sheets and for cutting steel bars, band iron, etc. Main frame one piece solid steel with offset for clearance in cutting long sheets. Capacity 3/16 x 2" bars, 10 gauge sheets. Blades are made of high grade tool steel. Equipped with adjustable hold down.



NO. 1 PUNCH

Capacity 1/8" hole through 1/4" iron
Length 34". Wt. 23 lbs. Depth of throat 1 7/8"
Punches and dies 1/8" to 9/16" by 1/64"



**NO. 4-B
TINNER'S
PUNCH**

Capacity 1/4" hole through
16 gage iron
Length 8 1/2".
Wt. 3 lbs.
Depth of throat 2"
Punches and dies
1/16" to 9/32" by 1/64"

Also supplied with three punches and three dies, in cardboard carton.

**NO. 91
BENCH PUNCH**

Capacity 1/2" hole through
1/4" iron
1/4" hole through 3/16" iron
2" hole through 1/8" iron
Weight 82 lbs. Depth of throat 5"
Punches and dies 1/8" to 2"

CHANNEL IRON

2 1/2" Flange x 1/4" Web
Angle Iron
2 1/2" x 2 1/2" x 1/4"



NO. 92, 93 and NO. 94 BENCH PUNCH

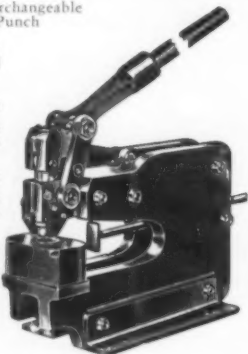
All parts interchangeable with No. 91 Punch

(Use No. 91 punches and dies)

No. 92 Weight 165 lbs.
Depth of throat 10"

No. 93 Weight 500 lbs.
Depth of throat 18"

No. 94 Weight 675 lbs.
Depth of throat 24"



THE BEST IN HAND PUNCHES SINCE 1907 W. A. WHITNEY MFG. CO.

636 RACE STREET



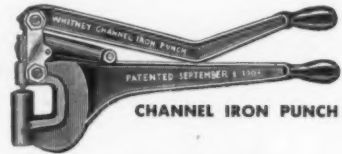
ROCKFORD, ILLINOIS

W. A. Whitney tools are your best bet because they are simple in design, sturdily constructed for the toughest uses, well balanced for easier handling, made from drop forgings of high grade alloy steel on all main parts, heat treated on all wearing parts, and unconditionally guaranteed against defects in material and workmanship. Our trade mark on every tool is your assurance of entire satisfaction and the utmost in service. Please write us today for our new catalog, then contact your Jobber.



NO. 2 PUNCH

Capacity 5/16" hole through 1/4" iron
Length 23". Wt. 14 lbs. Depth of throat 1-11/16"
Punches and dies 3/32" to 1/2" by 1/64"



CHANNEL IRON PUNCH

(A companion to No. 2 Punch)
Capacity 1/4" hole through 1/4" iron
Length 23". Wt. 17 lbs. Depth of throat 1 7/8"
Punches and dies 3/32" to 1/2" by 1/64"



NO. 6

Skylight Ventilating and Tank Flange Punch (Especially adapted for button punching)
Capacity 1/4" hole through 3/16" iron
Length 26 1/2". Wt. 10 1/2 lbs. Depth of throat 1 1/2"
Punches and dies 1/8" to 9/32" by 1/32"

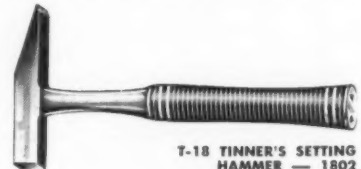


NO. 8-B PUNCH

Capacity 1/4" hole through 1/4" iron
Length 18 1/2". Wt. 7 1/2 lbs. Depth of throat 2"
Punches and dies 1/16" to 7/16" by 1/64"



**T-12 TINNER'S RIVETING
HAMMER — 1202
T-12 POLISHED
B-12 BLACK**



**T-18 TINNER'S SETTING
HAMMER — 1802
T-18 POLISHED
B-18 BLACK**

PUNCHES					DIES				
Whitney Punches For Ball Bearing Screw Punches					Whitney Dies For Ball Bearing Screw Punches				
No.	Sizes	Dimensions H. B. L.	Inches		No.	Sizes	Dimensions D. L.	Inches	
10-1/8	to 1/2	by 32nd	5/8	1-3/16	10-1/8	to 1/2	by 32nd	13/16	15/32
20-1/8	to 11/16	by 32nd	7/8	1-3/4	20-1/8	to 11/16	by 32nd	1-1/4	21/32
40-3/16	to 1	by 32nd	1-3/16	2-5/16	40-3/16	to 1	by 32nd	2-1/8	15/16
PUNCHES					DIES				
Whitney Punches For Lever Punches					Whitney Dies For Lever Punches				
No.	Sizes	Dimensions D. L.	Inches		No.	Sizes	Dimensions D. L.	Inches	
1	1/8 to 9/16 by 64th	9/16	2-3/8		1	1/8 to 9/16 by 64th	1	2	
*2	3/32 to 1/2 by 64th	1/2	2-3/8		*2	3/32 to 1/2 by 64th	7/8	1-3/4	
4	1/16 to 9/32 by 64th	5/16	1-3/16		4	1/16 to 9/32 by 64th	7/16	3/4	
5	1/16 to 9/32 by 64th	9/32	1-1/4		5	1/16 to 9/32 by 64th	7/16	3/4	
*6	1/8 to 9/32 by 32nd	1/2	2-3/8		*6	1/8 to 9/32 by 32nd	9/16	1-5/8	
7	1/8 to 7/16 by 32nd	7/16	1-7/8		7	1/8 to 7/16 by 32nd	3/4	1-7/16	
7-1/2	1/8 to 7/16 by 32nd	1/2	2-3/8		8	1/16 to 7/16 by 64th	11/16	1-1/4	
8	1/16 to 7/16 by 64th	7/16	1-15/16						

*This punch used in No. 2 Channel, Close Corner No. 2, Close Corner Channel, No. 6 and Imperial No. 8.

*This die used in No. 2, Channel, and Imperial No. 8.
*This die used in No. 6, Close Corner No. 2 and Close Corner Channel.
When ordering punches be sure to specify size of punches and number of tool in which punch is to be used.



Insist on the New Classic Thermostat...

***Get* Accurate Heating Control
Attractive, Modern Styling
Easy, Inexpensive Installation**



***Install DETROIT CONTROLS'
New Classic Thermostat
for Customer Satisfaction!***

DETROIT  CONTROLS
CORPORATION

5900 TRUMBULL AVE. • DETROIT 8, MICHIGAN
Division of AMERICAN RADIATOR & STANDARD SANITARY Corporation

Representatives in Principal Cities—Canadian Representatives:
RAILWAY AND ENGINEERING SPECIALTIES, LTD.,
Montreal, Toronto, Winnipeg



The Classic will add style and saleability to the heating systems you manufacture, sell or install.

Its smart, modern design will complement the decoration of any home, new or old. The single, large numbered dial is slanted for perfect vision—can be read at a glance! The temperature selector is directly under the indicator needle—eliminates fumbling with old-fashioned turning or twisting devices.

Installation is very simple. No precision levelling is necessary. The Classic requires only two wires—easily replaces any two or three wire thermostat of earlier design.

Close control of any type heating, within a *fraction of a degree*, is assured by Detroit Controls' Timed Cycling function.

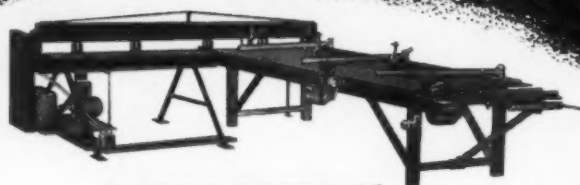
National advertising in Better Homes & Gardens, Small Homes Guide, Home Modernizing and other magazines will bring broad consumer acceptance to the Thermostyled Classic.

Take Advantage of this opportunity...

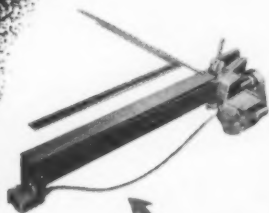
SELL THE *Classic*

AUTOMATIC CONTROLS for DOMESTIC HEATING • AIR CONDITIONING • REFRIGERATION • AVIATION • TRANSPORTATION • HOME APPLIANCES • INDUSTRIAL USES

Master Planning With Ezee



SHOPMASTER ↗



BENCHMASTER ↗



↗ EDGEMASTER



DUCTMASTER ↗



JOBMASTER
Multiple Notching Unit



Bench Bar
Rulometer **Square**

Our specialist will visit you on request

ENGEL SHEET METAL EQUIPMENT, INC.
3001 UNION AVE. ST. LOUIS 15, MO.

Let's get to the HEART of the matter—

TEMCO's

*Ceramic-Clad**

HEAT EXCHANGER...

... WITH WRITTEN

10-year warranty!

The heating system is the heart of a home.

Similarly, the heat exchanger is the heart of any automatic gas central heating unit.

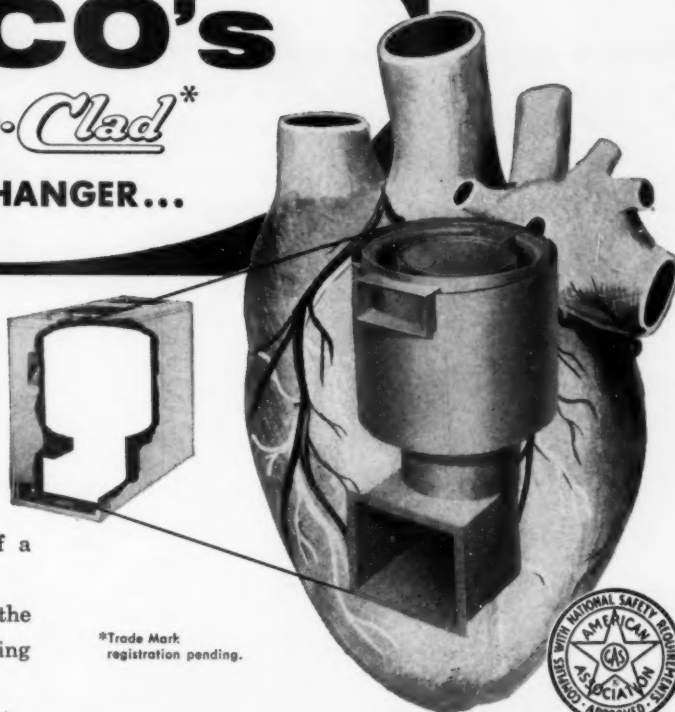
That's why TEMCO's exclusive Ceramic-Clad process is important to you.

The heat exchangers in all TEMCO Lo-Boys, Hi-Boys, Gravity Furnaces and Counter-Flo Furnaces are finished in Ceramic-Clad — the "Lifetime" Porcelain Enamel finish that is impervious to rust and will never burn out.

Ceramic-Clad, pioneered and patented by TEMCO, is similar to the finish used for jet aircraft combustion chambers. It's capable of withstanding temperatures far higher than any furnace will ever reach.

And in addition to Ceramic-Clad, TEMCO brings you other outstanding features such as exclusive Uni-Port Burners and silent operation.

**Turn to TEMCO for the
best in gas central heating**



*Trade Mark
registration pending.

TEMCO, inc.

NASHVILLE 9, TENNESSEE

"Gas Heating Specialists for the Nation"



"THE COMPLETE LINE OF GAS HEATING EQUIPMENT"

ROOM HEATERS • FLOOR FURNACES • WALL HEATERS
WARM AIR FURNACES AND AIR CONDITIONING

TEMCO, Inc., Department B-804
Nashville 9, Tennessee

Please send me the full story on TEMCO's new Ceramic-Clad process and TEMCO's complete line of automatic gas warm air furnaces.

Name

Address

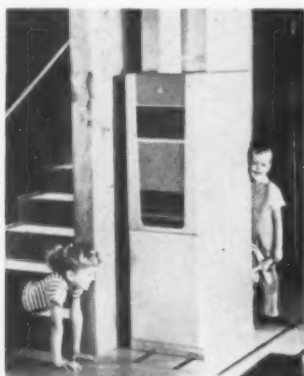
City Zone State

EQUIPMENT DEVELOPMENTS

The latest information on manufacturers' developments is presented here with brief summaries of the application of these products. For additional product information which is available, see this month's New Literature department

Furnaces for Combination Use

"WINTER WEATHERMAKER" gas and oil fired furnaces ranging from 75,000 to 231,000 Btuh and featuring "air conditioning design" — Carrier Corp., 300 S. Geddes St., Syracuse 1, N.Y. Available in highboy, counterflow and horizontal units and approved for use with all gases and with oil, units are designed for quick adaptation to year 'round use. Conversion is accomplished by lifting the plenum front cover, slipping in a cooling and dehumidifying coil and connect-



ing it to an air cooled condensing unit at any outside location. Matching plenum atop the unit serves as a section of duct. Vertical units are 4½ ft high, 28 in. deep. Dual control center which regulates summer and winter temperatures is standard equipment, the company reports. Featured are "cushion power" solenoid valve, plug-in safety pilot or automatic 100 percent shutoff pilot, die formed and seam welded heating element.

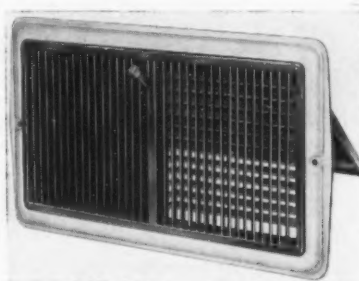
Evaporative Condenser

MODEL MC MIDGET evaporative condenser designed for residential application — Refrigeration Engineering, Inc., 7250 E. Slauson Ave., Los Angeles 22. Available in 2, 3, 4 and 5 ton sizes, the condenser features low head pressure, according to the manufacturer.

Registers and Grilles

NO. 20 SERIES residential and "Multi-Trol" series commercial registers and grilles — Air Control Products, Inc., Coopersville, Mich. Residential air conditioning models have adjustable four way air control; air volume may be adjusted at register face without

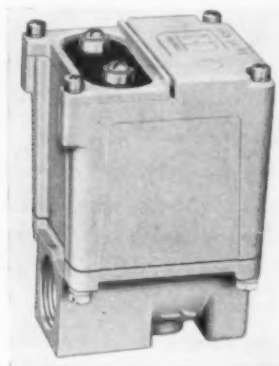
changing air pattern. Spring loaded volume control damper opens 90 deg. Adjustable vertical front louvers and back louvers permit air control in horizontal and



vertical planes. Registers and grilles are available for sidewall and baseboard use in standard sizes. Commercial series features face bars with air foil contours to reduce resistance and noise, the company states. Opposed action louvers are designed so depth of the valve is reduced to permit use of double deflection registers in standard ducts and stackheads.

Gas Valve with Oil-Cushioned Parts

MODEL V-80 GAS VALVE designed for quiet operation with moving parts cushioned in oil — Minneapolis-Honeywell Regulator Co., 2726 Fourth Ave., S., Min-



neapolis 8. Said to combine the features of diaphragm and solenoid valves, the unit has sealed, oil-filled powerhead which contains magnetic operator to provide motivating force; oil dampens plunger stroke. Mechanical and electrical parts have been removed from the gas stream. Bleed lines, bleed burners or terminal strips are not required, according to the company. "Self-aligning" valve disc is coupled and spring

(Continued on page 185)

25,000,000 lbs. of steel sheared by cost cutting **CINCINNATI SHEARS**

at **HAMILTON MFG. CO.**

Two Rivers, Wis.

Accurate high production, at low cost, is maintained by a battery of Cincinnati Shears—in the manufacture of Hamilton automatic washers and dryers, hospital and laboratory equipment.

These money making Cincinnati features have brought results—

- Durable All-Steel Interlocked construction.
- Automatic Pressure Lubrication
- Accurate Back Gauge.
- Powerful Hydraulic Holddowns.
- Inclined Ram.

Cincinnati Shears accurately cut various thicknesses of material, without a change in knife clearance—this is a profitable time saver.

Investigate these modern money making tools. Write for Catalog S-7.

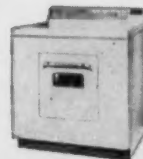
Photos courtesy the Hamilton Mfg. Company, Two Rivers, Wisconsin.



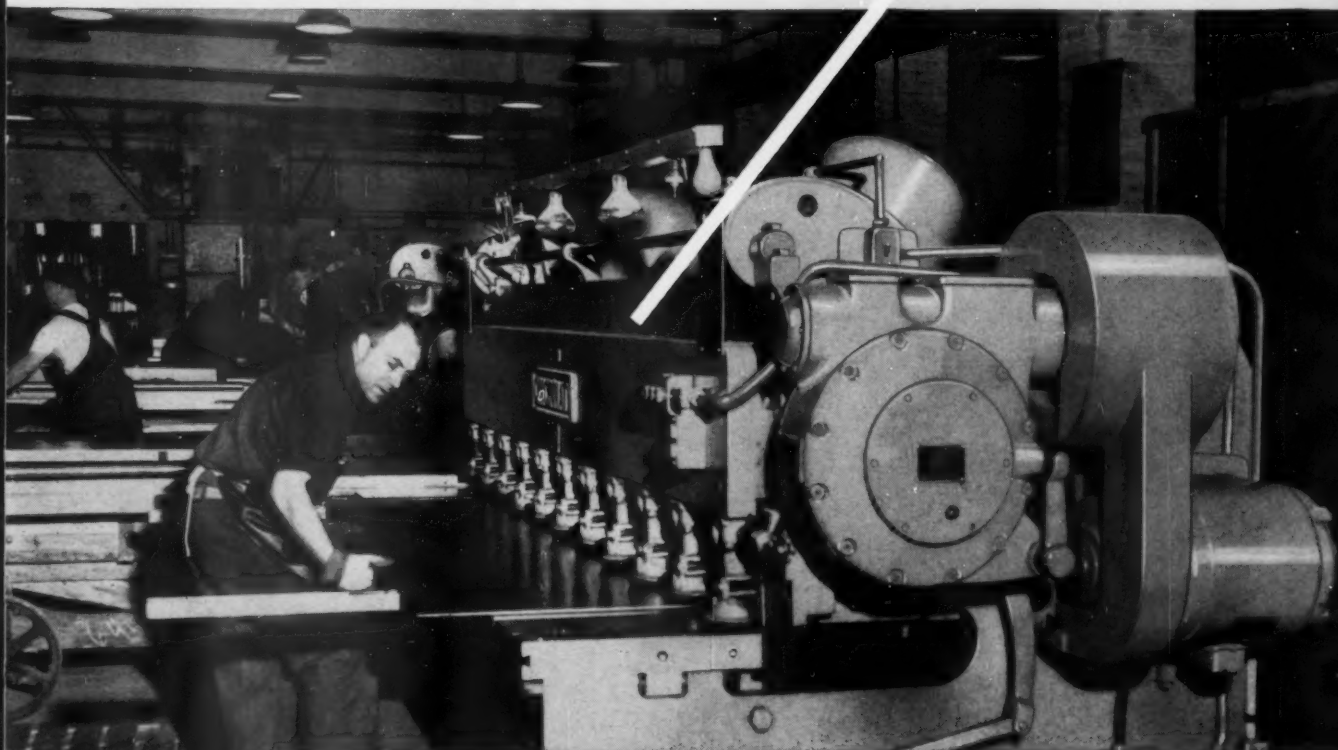
Steel laboratory equipment



Examining room equipment



Home laundry clothes dryer



THE CINCINNATI SHAPER CO.

CINCINNATI 25, OHIO, U.S.A.

SHAPERS • SHEARS • BRAKES



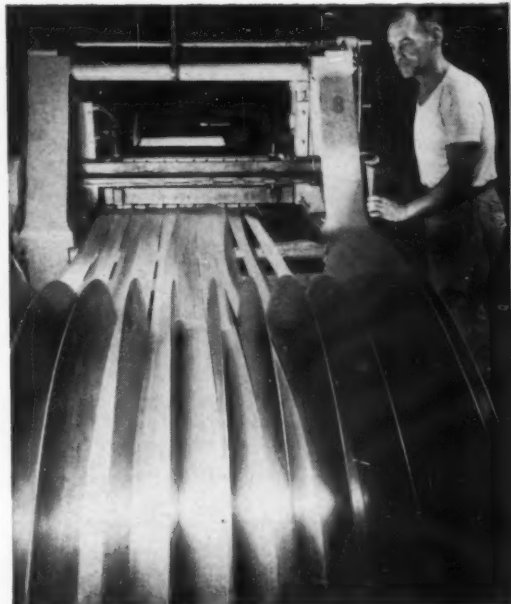
Van Huffel Tube Corporation selects

USS Galvanized Steel Sheets



1

Coils of USS GALVANIZED STEEL SHEETS in multiple widths—as delivered to Van Huffel—ready to start their trip through some of the toughest forming operations imaginable.



2

Here USS GALVANIZED STEEL SHEETS pass through the first step of process. They're being slit into the proper widths for the sections into which they'll be formed.



First Stand. Strips of USS GALVANIZED STEEL SHEETS pass into first stand of the cold-forming operation. The cold-forming machines consist of a series of roll stands—each with a special set of roller dies—through which strip is passed.

3



for severe and intricate forming operations

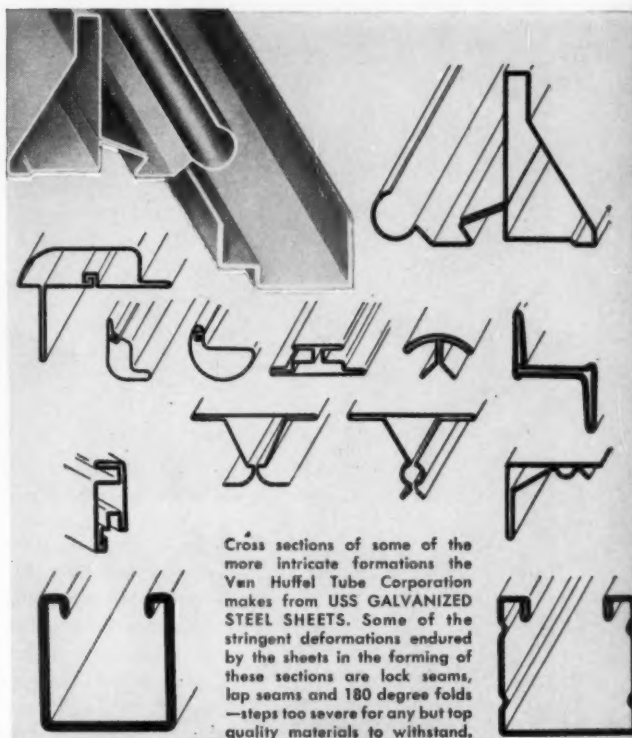
THE SLOGAN of this leading Warren, Ohio, manufacturer is: "Van Huffel—where ideas take shape—in metal." And, in manufacturing over 6000 different cold-formed shapes and tubing sizes, Van Huffel is really living up to its reputation. Because many of these shapes and tubes are of very complicated and severe design, it is imperative that they be formed from only top quality steel! That's why United States Steel is proud to be a supplier to Van Huffel Tube.

USS Galvanized Steel Sheets have outstanding qualities which make them especially valuable to Van Huffel, and to you. They have a tight, uniform zinc coating that will not flake or chip even under this severe bending or folding. They draw smoothly and evenly. And USS Galvanized Steel Sheets are uniform in gage, assuring a sound finished product. These qualities are of vital and equal importance in the difficult forming operations for which Van Huffel Tube is justly famous.

Perhaps there's a place in *your* operation for USS Galvanized Steel Sheets? If there is, take advantage of all the benefits of USS Galvanized Steel Sheets. For more information, ask your sheet distributor or our nearest district office. United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

UNITED STATES STEEL CORPORATION, PITTSBURGH
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.

UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST
UNITED STATES STEEL EXPORT COMPANY, NEW YORK



4 Last Stand. Finished formed section emerges from last stand of operation, ready to be sheared to length and shipped. From the time the flat strip is fed into the first roll until the section is finished, the galvanized sheet undergoes a series of progressive deformations in the intermediate roll stands.

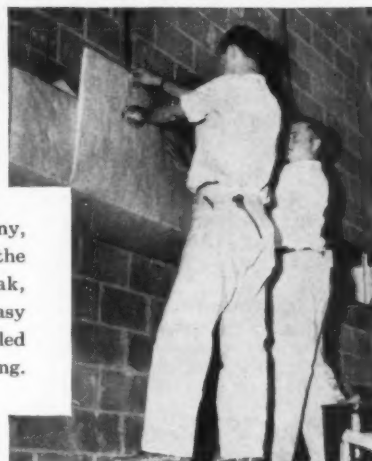


USS GALVANIZED STEEL SHEETS

UNITED STATES STEEL



Wayne Johnson, of Johnson Insulation Company, used Super-Fine to insulate ducts for the Northwood Shopping Center in Royal Oak, Michigan. He found Super-Fine lightweight, easy to handle and cut—yet so strong it could be pulled between the ducts and walls without tearing.



Super-Fine's low installation cost means big business for contractors!

Fast installation combined with high insulating efficiency can clinch the contract for you.

Super-Fine's millions of fine glass fibers form countless dead air cells which provide highly efficient insulation. It is pleasant to handle—fast and easy to apply. It cuts readily with an ordinary knife, needs no special measuring or fitting,

can quickly be wrapped around ducts and supporting hangers. Contractors find that workmen can apply more Super-Fine per day than other types of insulation.

You save on storage space, too, because Super-Fine comes in compressed rolls up to 72" wide, in all standard thicknesses and roll lengths. They take up less space,

yet the insulation springs back to full thickness when unrolled.

There's big business ahead for you when you discover how Super-Fine can help you save on duct-application costs. Check your Yellow Pages for the nearest distributor or write: L·O·F Glass Fibers Company, Dept. 45-16, 1810 Madison Avenue, Toledo 1, Ohio.



L·O·F GLASS FIBERS COMPANY

TOLEDO 1, OHIO

Makers of glass fibers by the exclusive "Electronic-Extrusion" process

equipment developments (Continued)

loaded to the valve disc arm; disc has a compression ridge at outer edge for tight closure. Floating disc is designed to permit installation of the valve in any position in a complete circle in a horizontal line; valve seat is at a 45 deg angle to permit straight line gas flow and keep foreign materials from lodging on the seat.

Room Air Conditioner Line

FIFTEEN MODELS OF "built-in," conventional and casement room air conditioners in $\frac{1}{2}$, $\frac{3}{4}$, 1 and $1\frac{1}{2}$ ton models — Airtemp Div., Chrysler Corp., 1600 Webster St., Dayton, O. "Imperial" models in $\frac{1}{2}$, $\frac{3}{4}$ and 1 hp capacities can be built into the wall or installed



in a 28 in. or larger window. Units are flush on the outside. Control switches are on the side; cooling thermostat is included. Conventional models in $\frac{3}{4}$, 1 and $1\frac{1}{2}$ hp capacities can be mounted flush or half-in-half-out. Features are adjustable plastic grille, thermostat control, high and low speed fan control, fresh and exhaust air control, and sealed compressor. Casement models ($\frac{1}{2}$ and $\frac{3}{4}$ hp), designed for all standard casement sizes, are entirely enclosed within the room. Features are cushion mounted compressor, fan motors and fan blades; deluxe models have two speed blowers.

Ventilating Hood

"ISLANDER" TWO-SIDED ventilating hood designed for island and peninsular utility core — Stanthony Corp., 5341 San Fernando Rd. West, Los Angeles 39. Assembled and prewired unit has twin wheel centrifugal blower and twin grease filters. Switches are located in the blower housing.

Baseboard Diffusers

"PERIM-A-BASE PC" baseboard diffusers for combination heating and cooling systems — Berger Furnace Corp., 4th and Main Sts., Belle Vernon, Pa. During

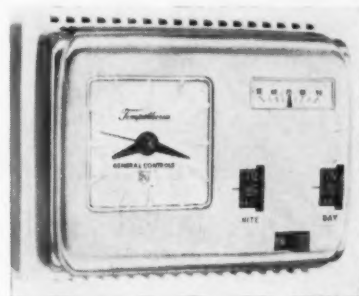
heating cycle, warm air is discharged into the room at a wide divergent angle and low velocity; radiant heat is also given off from panel's lower chamber which is



pressurized to maintain high temperatures on its exposed metal surfaces, the company states. Slots at top of the discharge chamber are proportioned to emit cooled air at sufficient velocities.

Clock Thermostat

"TEMPOTHERM" CLOCK THERMOSTAT designed to meet varied temperature demands in residence over a 24 hour period — General Controls Co., 801 Allen Ave., Glendale 1, Calif. Unit features mercury switch con-



tact and large white numerals on black roll type dials. Thermostat is sheathed in a thin stainless steel case and is hermetically sealed. Unit automatically raises room temperature at a predetermined time before occupants arise.

Fireplace Damper

"BENEFORM UNIVERSAL" damper designed for unusually shaped fireplaces with open sides — Bennett-Ireland, Inc., 11 Exchange St., Norwich, N. Y. Damper permits chimney stack location either directly above the fireplace or in 8 offset positions; downdraft shelf can be built at any of the four sides of the damper outlet. Removable damper valve pivots to tight enclosure; permanent tension on the valves permits close draft adjustment, the company states. Valve control is available with chain pull or rotary control. Damper is available in six sizes: 26 × 26 in., 30 × 16 in., 34 × 20 in., 38 × 20 in., 42 × 20 in., and

ANNOUNCING A New 5-Foot Joint SUPERIOR Spee-D-Lok FURNACE PIPE



A COMPLETE LINE OF STANDARDIZED GALVANIZED FITTINGS

● Save your heating contractors still more time, material and money with the new 5-foot length Spee-D-Lok galvanized furnace pipe. The same "tongue-in-groove" locking feature as Superior's popular accepted 2-foot length with the seam running the full 5-foot length of the pipe eliminates tooling and malleting. It's ready for use when they buy it. Just slip the tongue in the groove until it snaps! It cuts without damaging the locking edges. Cartons contain 10 5-foot joints. Superior color gauge system marks every size for quick, easy identification. Write for color chart.

See Your Wholesaler
Write for Our Catalog

SUPERIOR METAL FABRICATING
NILES, OHIO *Company*

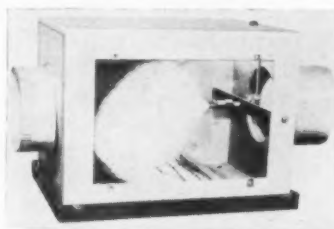
equipment developments

(Continued)

50 × 24 in. Handle location for rotary valve control may be located on either side of damper. Lintel width is 3 in. on all sides.

Spray Humidifier

CONTINUOUS FLOW spray humidifier said to provide up to 18 gal of water per day to the air when attached to any warm air furnace — Lennox Industries, Inc., 200 S. 12th Ave., Marshalltown, Ia. Continuous flow



spray is located in a bypass between supply and return plenums. Manually operated damper provides control; once damper is set, humidifier is self-regulating, with amount of moisture added being determined by temperature and volume of furnace air which passes through the spray mist and water-soaked filter. Continuous operation washes away solid matter and minimizes buildup of scale, according to the manufacturer.

Flexible Duct Connections

ADDED LENGTHS AND GAGES ON "Vibra-Stop" and "Flexi-Duct" flexible connectors — Grant Wilson, Inc., 141 W. Jackson Blvd., Chicago 4. Both types of



connections are now available in rolls of 25, 50 and 100 ft; "Vibra-Stop" now has a 24 or 26 gage galvanized metal strip in 4 in. width sealed to one side of a 4 in. strip of asbestos or canvas and a 3 in. width sealed on the other.

Safety Controls for Water Heaters

"DUAL SAFE" SYSTEM for gas fired water heaters, designed to provide automatic temperature control and 100 percent safety shutoff of gas when pilot fails — General Controls Co., 801 Allen Ave., Glendale 1, Calif. Featured are high temperature limit switch,

Simplify Your Installations!

Pre-Engineered **JETTRONAIRE** HEATING AND COOLING SYSTEMS

**You can install more
in less time . . . without
extra men or special tools.**

Jettronaire Heating-Cooling Systems are pre-engineered "packaged" units that give modern, controlled air circulation, comfort and economy. Use of round, 5" diameter pipes for the main part of system minimizes wall and joist cutting, speeds up installation time . . . makes money for you!

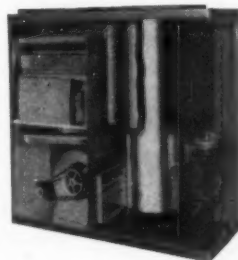
JETTRONAIRE FURNACES

At right, Jettronaire Lo-Boy furnace equipped with built-in electronic air cleaner. Side panel and front removed here to show details.

Other models . . . standard Lo-Boy and Hi-Boy . . . gas and oil burners feature two-pass heat exchanger guaranteed 10 years! Capacities from 72,000 BTU to 210,000 BTU.

All gas furnaces AGA approved; oil burners U/L approved.

EXCLUSIVE FRANCHISES AVAILABLE . . .
WRITE FOR DETAILS





**HEATING
SYSTEMS**

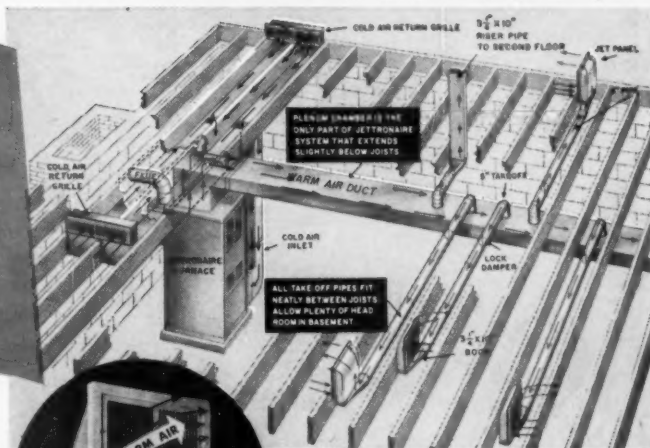
MANUFACTURED BY

JETTRONAIRE

INCORPORATED

1100 EAST WARRINGTON AVENUE
PITTSBURGH 10, PA.

AS MODERN AS TOMORROW'S HOMES!



TYPE B JET PANEL

for use with rectangular ductwork

One panel for heating and cooling! Possible because it circulates and re-circulates room air, intermixing smoothly, efficiently. Fits conventional ductwork or converts to 5" round pipes.

SMALL DIAMETER PIPES

Perfect for conversion jobs in older homes. Work exceedingly well with standard rectangular ducts on risers.

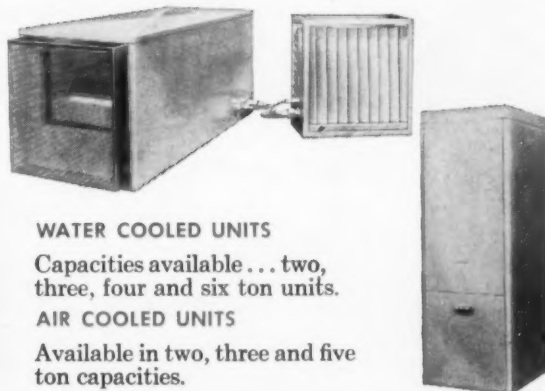
NO OBJECTIONABLE DRAFTS

Patented grill permits room air and warm, filtered furnace air to circulate and re-circulate, intermixing. Warmth flows into rooms smoothly, evenly . . . with no warm air blasts.

COOLING UNITS

adaptable to all models

All Jettronaire furnaces and heating systems are adaptable to cooling with simple change-overs. Installations can be made directly in ducts, side-by-side with furnace or at remote locations.

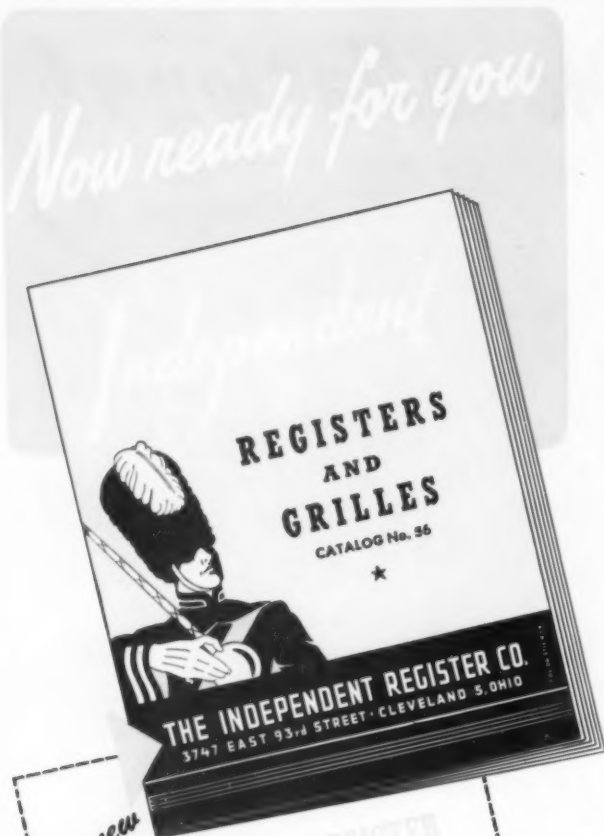


WATER COOLED UNITS

Capacities available . . . two, three, four and six ton units.

AIR COOLED UNITS

Available in two, three and five ton capacities.



the new

INDEPENDENT REGISTER
AND GRILLE CATALOG No. 36

This new catalog—just off the presses—contains 36 pages. The catalog provides selection tables, weights, open areas, sizes and prices of the complete Independent Register line of grilles, cold air faces, registers, and ceiling outlets—including new registers for perimeter heating and commercial installations.



Always Leading

Always Progressing



THE INDEPENDENT
REGISTER CO.

3747 E. 93RD STREET - CLEVELAND, OHIO

equipment developments

(Continued)

model G-2 thermostat control and 250 millivolt generator which holds pilot safety valve open with power generated from the heat of the pilot flame. If flame fails, generator loses its power and safety valve closes to shut off gas.

Restyled Furnace, Air Conditioner Line

REDESIGNED LINE OF furnaces and air conditioning units to provide more color and compactness — The Williamson Co., 3500 Madison Rd., Cincinnati 9. "Special" furnaces, formerly called "Assembled" line, are in neutral gray or white metallic baked enameled finish. "Gasaver," "Oilsaver," "Deluxe," and "Super"



lines are in silver-green, some in two-tone combinations. Restyled casings and burner-control vestibules are also featured. "Wethermatic" air conditioner line features compactness and new color styling. Outdoor compressor units have been redesigned to place the finned coil section above the compressor; air stream developed by the fan is used only to condense refrigerant. Height is increased; use of a condensate drain eliminates overhanging roof and louvers. Console air conditioners in space and duct type models have flange about the filter opening for installation in duct system for add-on cooling with gravity furnaces. Single cabinet size accommodates 2, 3 or 5 ton units.

Air Conditioning Capacitors

DRAWN OVAL air conditioner running capacitors with higher ratings designed to meet UL requirements for room air conditioners in 1956 — General Electric Co., Capacitor Dept., Hudson Falls, N. Y. Capacitors are 6 1/4 in. high with same base dimensions (2 5/32 × 2 27/32 in.) as previous models; oval cases are designed to save cost. Capacitors are available with ratings up to 15 uf at 440 volts a-c; 20 uf at 350

Looking For
LOW COST
Stainless Steel?



...then you want

MicroRold[®] 430 Sheet

Perhaps you have always thought of stainless steel as a luxury material and out of the question as far as your product is concerned . . . or maybe you have seriously considered using stainless steel only to find its cost prohibitive . . .

True, some grades of stainless steel are relatively expensive, but this is because they possess higher degrees of corrosion resistance, absolutely necessary in some highly corrosive applications. This is not the complete story, however, as there are other less expensive grades of stainless having sufficient corrosion resistance without sacrificing the other desirable stainless steel qualities of beauty, strength, long life, workability and ease of maintenance.

If extreme corrosion resistance is not a factor in your product, it would be unnecessary and costly to specify a higher grade of stainless than required.

This is where MicroRold 430 enters the profit picture . . .

MicroRold Type 430 is a straight chromium-stainless with a nominal composition of 17% chromium. Though it is less resistant to corrosion, it retains all of the other desirable qualities of stainless and has proven very satisfactory in a wide range of mild corrosion applications.

MicroRold 430 is the least expensive of our stainless types because it does not contain nickel. This results in a 7 $\frac{3}{4}$ c per pound difference in base price between Type 430 and Type 302, the most popular higher grade stainless. A saving of \$155 per ton is possible and is of merit to cost-conscious fabricators.

MicroRold Type 430 sheets are available in thicknesses .005" to .109" with 2B or 2D finishes; and in thicknesses .010" to .109" in No. 3, 4 and 7 finishes.

Send for your copy, "Care and Use of 430 Stainless"

Washington Steel
Corporation

1-A WOODLAND AVE.

WASHINGTON, PENNSYLVANIA



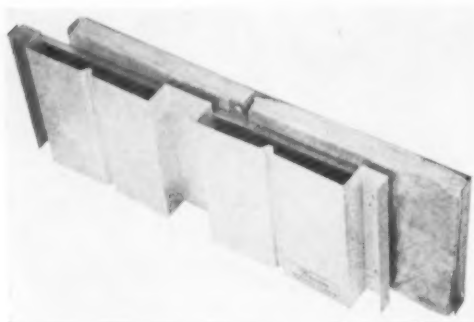
equipment developments

(Continued)

volts, and 23 uf at 330 volts. Increased ratings are designed to meet UL requirements which became mandatory Jan. 1 in line with new minimum power factor requirements.

Field Assembled Wall Panel

TYPE FA FIELD ASSEMBLED curtain wall panels in 16 ga. aluminum and 18 ga. galvanized steel — Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11.



Components are shipped to job site where erection and fabrication take place at the same time. Assem-

bled panel is 24 in. wide and nominally 3¼ in. deep in lengths up to 31 ft. Panels are deeply fluted with bold shadow lines.

Furnace, Air Conditioner Line

SIXTY MODELS of highboy, lowboy and counterflow warm air furnaces and air conditioning units to be introduced during 1956 to bring the total to 82 gas



and oil fired models ranging from 70,000 to 245,000 Btuh—Permaglas division, A. O. Smith Corp., Kankakee, Ill. Proportionately smaller than the current line of three basic 100,000 Btuh models, the smallest

Only General
Offers Both

UNIT-TYPE or TWO-PIECE HUMIDIFIER

PRESENTING THE **NEW**

GENERAL UNIT-TYPE "200"

Profit Companion To The Two-Piece 250

For the first time, your customers can choose the type of humidifier — unit-type or two-piece — best suited to the construction, capacity and demands of their warm air furnace. Only General offers this choice in one line!

The new GENERAL Unit-Type "200" is the most compact, easy to install warm air furnace humidifier on the market. It features an exclusive leveling feature which eliminates time-consuming adjustments and makes installation a simple, profitable operation.

Many of the unique features recently introduced in the two-piece Model "250" (no floats or needle valves to stick or clog, elimination of a separate overflow line, easy visual check of evaporation) are available in the preassembled "200" plus the advantage of ceramic "porous weave" Porosil evaporating plates which offer far greater evaporating qualities for more efficient, trouble-free humidification. Ask your jobber to show you the sensational Unit-Type "200" right away. Or write to General Filters, Inc. for details.



SMALLEST plenum opening bar none! Total dimensions just 3¼" x 3⅝"!

SIMPLEST of them all to install — in either straight or sloping plenums! No fiddling adjustments!

EXCLUSIVE automatic leveling feature! Adjusts balance, water level, line pressure in one operation!

BUILT-IN diaphragm controlled nylon valve, water filter and overflow feature are one unit! Install it . . . service it pre-assembled with pan!

VISUAL CHECK of evaporation! Rate of drip from hydrant into standpipe indicates rate of evaporation!

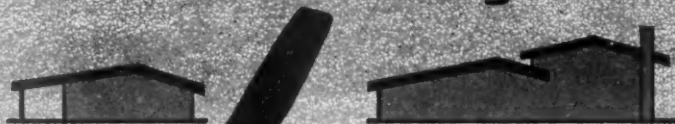
STANDPIPE acts as overflow! No extra lines to install, no tapping into sewers!

**ANOTHER
OUTSTANDING
PRODUCT OF**

GENERAL FILTERS, INC.

13806 Grand River Avenue, Novi, Michigan
IN CANADA: Canadian General Filters, Ltd., 38 Lombard Blvd., Scarborough, (Opposite 161, Ontario)

small homes or large homes



YOU get more quality at less cost with

Majestic

the FULL LINE OF HEATING AND AIR CONDITIONING EQUIPMENT

THULMAN Fireplace AND Chimney

The modern fireplace and chimney—or chimney alone—that cuts installation time and construction costs by *eliminating masonry*. The fireplace, UL-labeled for safety, can be installed on a wood floor with combustible building materials butting directly against the outer casing—all clearances are built in! The chimney is an integral part of the fireplace or, as a separate chimney in the 7-inch flue size, is ideal for the venting of furnaces and other appliances—even incinerators! Listed by Underwriters' Laboratories for all fuels . . . for 1 to 2-story homes with or without basements! No footings—no special construction!



Majestic offers a single source for quality heating equipment of many types—forced warm-air furnaces, matching summer cooling units, and factory-fabricated metal fireplaces and chimneys—all at thrifty prices and all designed for quick, simplified installation to save on-the-job costs.

A FURNACE FOR EVERY HOME NEED

Whatever your need or preference, you can now have the extra advantages of Majestic's quality winter air conditioners. Majestic's full line includes a choice of models for homes of every size. There are automatic gas or oil units suited to every type of modern, forced-air heating system—horizontal flow, downflow, or upflow designs. They range from 76,000 BTU output units (only 22" square at the base) to large furnaces delivering nearly 400,000 BTU. Majestic's counterflow furnaces, a design so often in demand in modern heating systems, deliver rated capacities up to 200,000 BTU!



SENSATIONAL NEW AUTOMATIC CONTROL!

Majestic research has developed a new, interlocking control for year-around air conditioning systems that completely solves the re-humidification problem—a problem found in many home conditioning systems. Don't settle on any system until you have full details on this amazing control!

See your Majestic dealer today



The Majestic Co., Inc.

A complete line of MATCHING AIR CONDITIONERS



Complete, packaged home air conditioning in matching units—twins in size and appearance—is Majestic's answer to the latest trend in building year-around comfort into American homes. Majestic's line of upflow, downflow, and horizontal flow cooling units—2- and 3-ton capacities in both water-cooled and air-cooled condensers—makes system-matching a cinch! Larger water-cooled units are also available.

See your Majestic dealer today

Majestic

394 ERIE STREET
HUNTINGTON, INDIANA

Only WALKER Has It!

Automatic Draft Control with Full Protection at All Vital Points!




Pat. Pending

Royal Purple Model

Think of it! A draft control that's absolutely impregnable to soot, carbon, corrosion and dust . . . one that will give years of accurate, trouble-free service in spite of the most adverse operating conditions! The new Walker ROYAL PURPLE model is the first—and only—draft control with positive, all-point protection. These revolutionary improvements can't be copied or duplicated—they're exclusively Walker because of pending patents.

The Royal Purple—Hit of the Philadelphia Show

THE INSIDE STORY



The weight adjustment assembly on the ROYAL PURPLE model is sealed in by a protective housing which keeps mechanism absolutely free from dirt deposits. Unretouched photo at right shows back of vane and housing after more than a year's service. Cut-away shows spotless condition of sealed-in weight adjustment assembly. Clean, corrosion-free



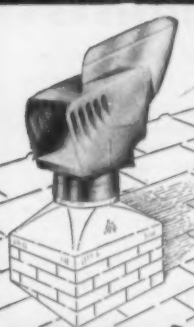
operating parts assure ease of adjustment at any time.

This front view of an actual installation shows location of pivot pins which control vane movement. Notice how they are located on front face of damper and set back, away from edge. Box-type hinges completely seal delicate knife-edge pivots, keeping them clean and sensitive even after years and years of service.

For complete details on this sensational new development in draft control, see your jobber or write Walker Manufacturing and Sales Corporation.

Another Outstanding Walker Development

VENTURI-TOP CHIMNEY CAP



Ideal for both heating (gas, oil or coal) and ventilating applications. Directional vane keeps throat of vent facing into wind for maximum draft control. Sloping-throat design prevents back drafts and actually increases draft effectiveness by constricting it as it passes over chimney opening. Unit rotates on a friction-free, hardened-steel ball bearing. Pivot is also of hardened steel to assure lifetime operation. Ring guide bearing in pivot post keeps cap absolutely perpendicular—doesn't sag or lean. Streamlined design is both attractive and functional—a combination which makes it a favorite with today's architects.

Walker Manufacturing and Sales Corp.

1730 Penn St.

St. Joseph, Mo.

equipment developments

(Continued)

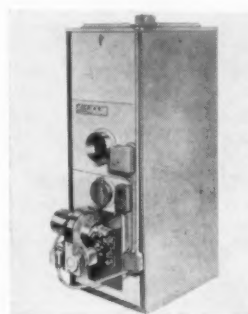
models are said to be 14 in. wide × 25 in. deep; exposed controls have been eliminated, the company reports, and draft diverters are now built into the units. Addition of the 70,000 and 85,000 Btuh units is for a variety of new home installations; larger units are for the replacement market and large homes. All models will have ceramic coated, multiple radiator heat exchangers. Also featured are optional modulated controls. Cooling units in year 'round systems will be relocated to a vertical arrangement. Expanded air conditioner line will include 12 year 'round units, and 26 summer air conditioners, air and water cooled, vertical, horizontal and remote, and in 2, 3 and 5 ton capacities. Restyling and color are designed to enhance the appearance of the units.

Oil Fired Counterflow Furnace

"PARKWAY" MODEL DF-0 oil fired counterflow furnace rated at 84,000 Btu output — Heil Co., 3000 W. Montana St., Milwaukee 1. Designed for small to medium sized houses, the furnaces occupy a little over 4 sq ft of floor space and are 62 in. high. Optional sub-base permits unit to be installed on combustible flooring, according to the manufacturer. Featured on all models are the company's Model CB-1 pressure-atomizing oil burner and "Heat Bank" heat exchanger. Units are preassembled and prewired.



Above: Pilot valve



Right: Counterflow furnace

Pilot Valve

PILOT VALVE with brass body and aluminum plug in four models: right hand, right hand throttle, left hand and left hand throttle — Thermac Co., 800 E. 108th St., Los Angeles 59. Valves have connections for 1/3 in. NPT × 1/4 in. compression and with 3/16 in. gas way connections in various combinations.

Solder with Dual Action Flux

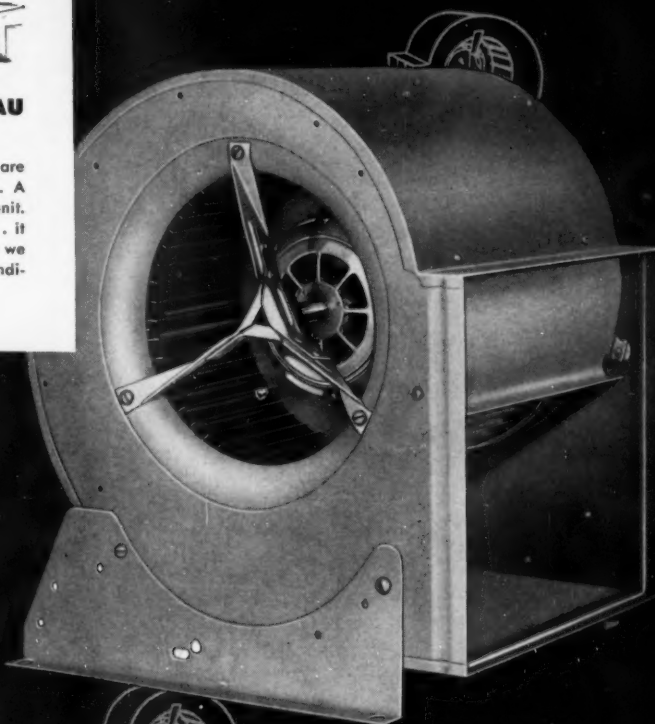
"FAS-TIN" SOLDER containing flux which is said to clean dirt and suspend the surface oxide—Farrelloy Co., 1245 N. 26th St., Philadelphia 21. According to the company, the "envelope" around the solder parti-



LEADERS RELY ON LAU

25 Years Building Better Blowers

When new developments in blowers are possible you'll see them FIRST at Lau. A case in point is the "ELECTRO-WHEEL unit. The motor is new and revolutionary . . . it revolves on a stationary shaft . . . thus we overcome a multitude of frustrating handicaps present in a direct-drive blower.



FIRST IN THE INDUSTRY



THE LAU BLOWER COMPANY

2000 Home Avenue • DAYTON 7, OHIO

Other plants at Kitchener, Ont., Canada, and Azusa, California

*ELECTRO-WHEEL is the name of this new Lau direct-drive blower that will deliver more air with less power load than ever before, because it has unobstructed air inlets on both sides of the wheel. The new, compact motor, an integral part of the blower wheel center disc, revolves on a stationary shaft, rubber-encased on both ends. This means efficient elimination of noise and vibration. And two rigid tripod mountings have minimum interference to air flow . . . give greatest shipping strength. Five sizes: 9" and 10" wheels; air deliveries from 500 to 1500 cfm; ¼ h.p. motor. Available with or without housing supports which may be mounted in pre-punched holes for any discharge angle. Write Lau, Dept. M for further data.

*Trade Mark

LB-1-56



SERIES "A"
BLOWER



ELECTRO-WHEEL
BLOWER



LAU-PAK
BEARING



SERIES "A"
WHEEL



WELD
WHEEL



LAU STEEL
PULLEY



BEARING
BRACKET



PANEL
FAN



RANCHER
FAN

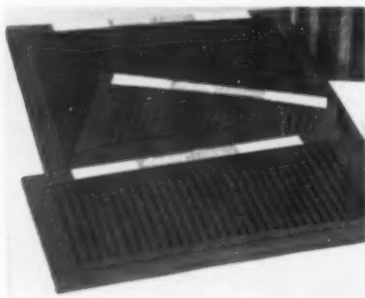
WORLD'S LARGEST MANUFACTURERS OF AIR-CONDITIONING BLOWERS

equipment developments (Continued)

cles lowers surface tension of the solder and metal, releasing a rain of solder particles to coat the metal uniformly. Solder works on all metals except aluminum, the company reports.

Activated Charcoal Filter

ACTIVATED CHARCOAL air purification filter designed for room air conditioners and forced air furnaces — Barnebey-Cheney Co., Cassady at 8th Ave., Columbus



19. O. Fiber-reinforced activated charcoal strips in modernistic gridwork provide increased exposed charcoal surface area for higher rate of absorption of

odors, gases and vapors, bacteria and mold spores from the air, according to the manufacturer.

Room Air Conditioner

"SNORKEL" MODEL D100AP room air conditioning unit which can be installed as a floor unit, as a free-



hanging unit, in casement or double-hung windows, through the wall or on an undercarriage for portability — York Corp., Roosevelt Ave., York, Pa. Unit can be used in connection with any heating system, the company reports. Dimensions are 24½ in. high, 31 in. wide, 12¾ in. deep. Front panel of the unit may be replaced with electric glass radiant heat panels. Featured are permanent air filter, blower frame of

Char-Gale

AROUND THE CLOCK DELIVERIES

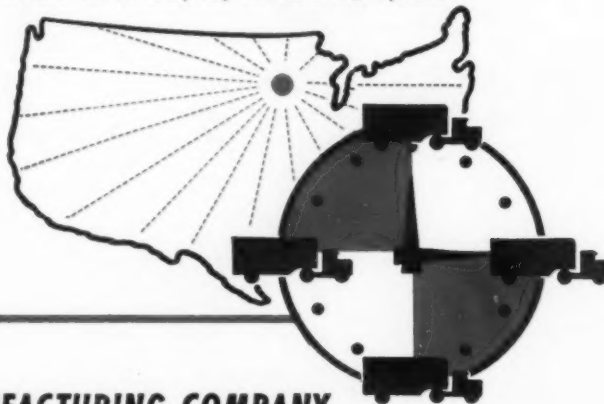
Bring you prefabricated ducts and fittings...
when you want them at prices you want to pay

Backed by 300,000 Sq. Ft. of Productive Capacity. From the huge Char-Gale factory, you can be sure of adequate supplies of the following items:

Aluminum Fittings • Aluminum Pipe and Elbows • Aluminum Sheets • Galvanized Fittings • Galvanized Pipe and Elbows • Galvanized Sheets • Complete Small Pipe Systems; both Aluminum and Galvanized • Seamed Heat Tubing • Button Lock Heat Tubing • Humidifiers • Rain Goods • Registers—Complete Line, both Perimeter and Conventional, including Floor Diffusers • Baseboard Diffusers in 2, 4 and 8 foot lengths.

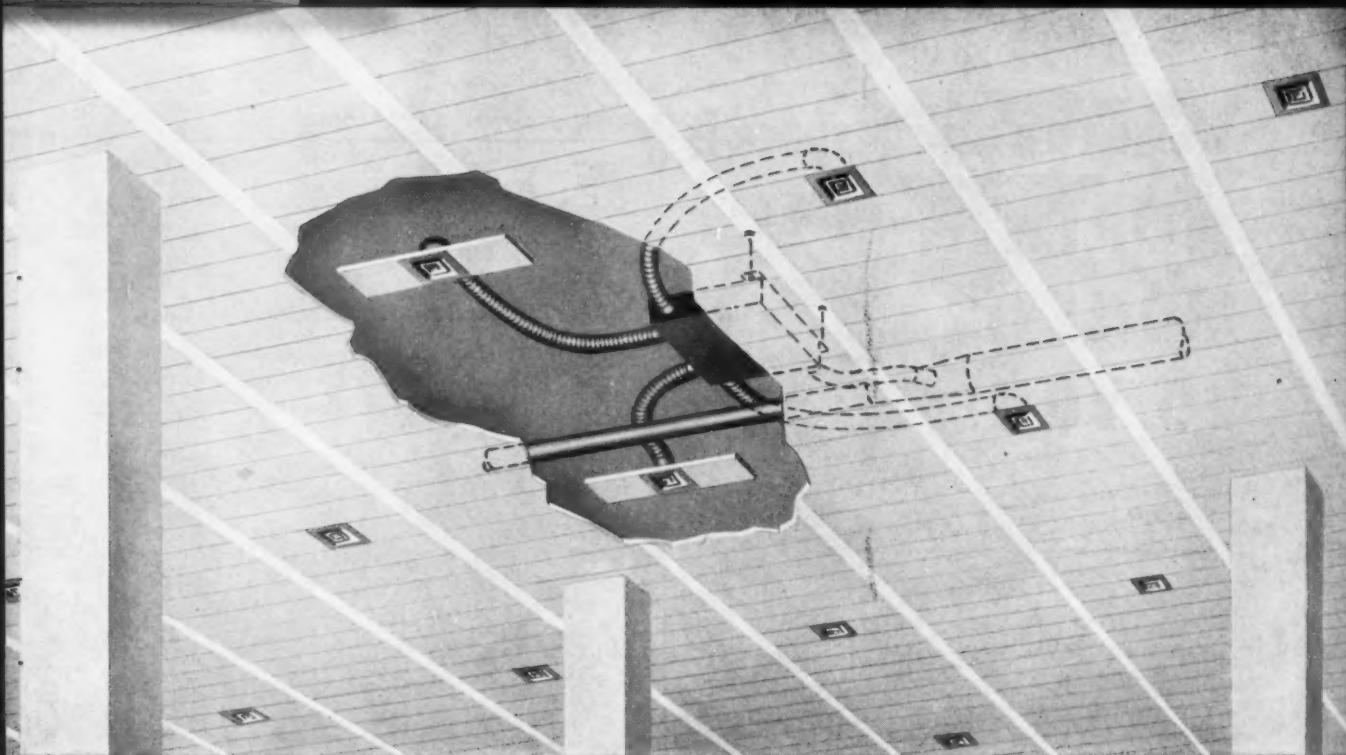
Rapid, nation-wide delivery service by Char-Gale's own fleet of trucks means prompt movement of Char-Gale products direct to you. It reduces your inventories to save you money and space. And you benefit from ordering mixed truckloads.

Ask about the extra-capacity Gale-Aire 4½" System.



Char-Gale

MANUFACTURING COMPANY
ANOKA, MINNESOTA



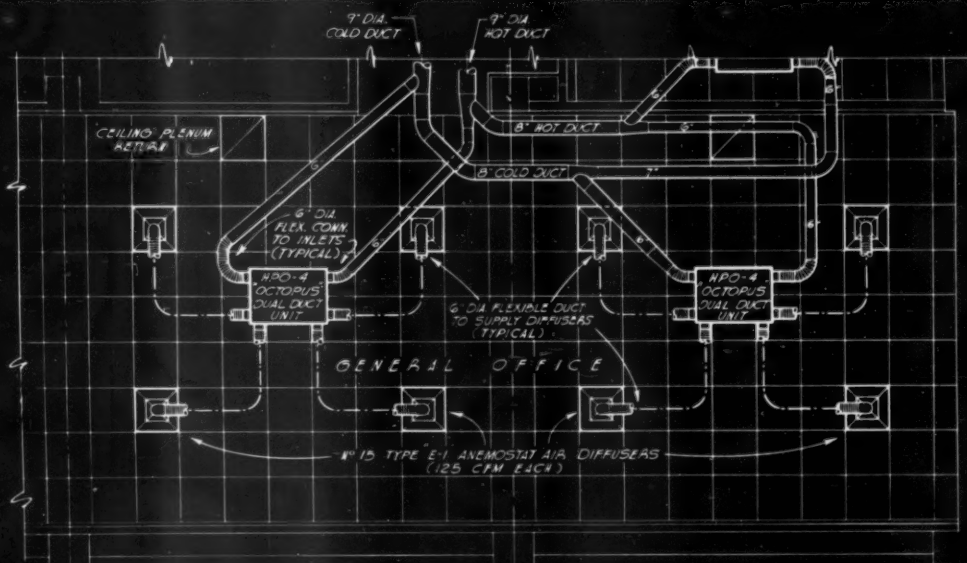
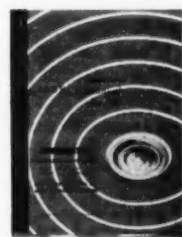
Here's flexible high velocity air diffusion

Here's how the new Anemostat Octopus unit works in interior zone air conditioning. High velocity air travels to a sound attenuator volume control unit, which has from two to four openings. The air is carried from these outlets through flexible hose to Anemostat diffusers. These have the same outer dimensions as the acoustical panels. If the space must be adjusted to meet changing conditions, such as subdivision of the occupied area, ceiling panels and diffusers can be quickly relocated by merely moving the flexible hose.

Air can be supplied to the Anemostat Octopus sound attenu-

ators from a dual-duct system with a thermostat controlling one bay, or from a single-duct system with automatic or manual control.

Write on your business letterhead for Selection Manual 50 which gives full application and specification data on wide range line of Anemostat All-Air High Velocity units. Anemostat Corporation of America, 10 East 39th Street, New York 16, N. Y.



Diagrammatic illustration of office building showing Anemostat HPO-4 Dual-duct Units.

This extra utility space is WORTH MONEY TO YOU!

There's more
space here

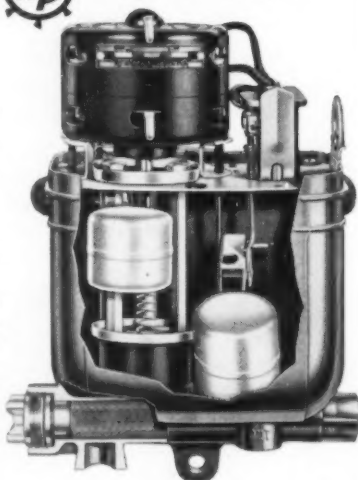
... because
OILIFTER is
installed here

... to pump from
this underground
tank

*Tell your customers
about*  **OILIFTER**

Quick facts on big features:

- **POSITIVE PROTECTION AGAINST OVERFLOW** — safety float maintains normal, economical operating level
- **100% SAFE** — automatic cut-off switch stops operation if tank becomes dry.
- **TROUBLE-FREE** — 100 mesh strainer positively stops dirt and impurities in oil.
- **EASY TO INSTALL** — 3 screws to mount, only one 1/4" copper tube.



OILIFTER makes a big hit with customers — creates valuable space *inside* because oil tank goes *outside* — underground. It automatically lifts oil from tank to heater as much as 25 feet away! Customer starts Oilifter at the beginning of the season ... no further attention is required. Operates silently, no radio or TV interference. *One more A-P profit package for you!* Order from your distributor, or write:

A-P CONTROLS CORPORATION

2452 N. 32nd Street, MILWAUKEE 45, Wis.
COOKSVILLE, Ontario NIJMEGEN, Holland
For Export: 13 E. 40th Street, New York, N. Y., U.S.A.

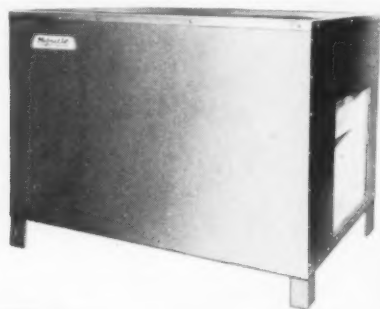
equipment developments

(Continued)

zinc grip steel; rust resistant coating on chassis parts and capillary tube which controls refrigerant flow.

Air Cooled Remote Condensing Unit

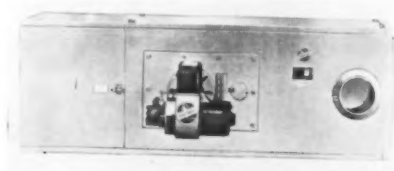
RA SERIES air-to-air remote condensing units in 2, 3, and 5 ton capacities with horizontal or vertical flow evaporators — Majestic Co., Inc., 733 Erie St.,



Huntington, Ind. Unit is in a weatherproof housing; controls are in a watertight enclosure. According to the manufacturer the "oversize" air coil in the condenser provides efficient heat exchange with outside temperatures up to 120 F.

Oil Fired Horizontal Furnaces

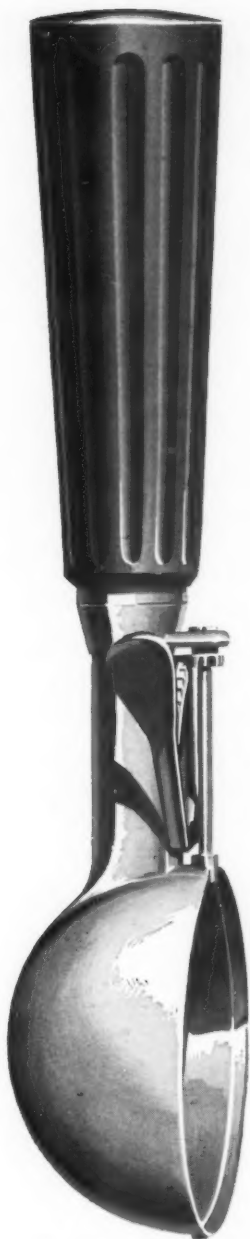
MODELS OT8-85 AND OT14-111 oil fired horizontal furnaces rated at 85,000 and 111,000 Btu output at bonnet and convertible to highboy units — Thermo-



Products, Inc., North Judson, Ind. Units can be installed in reduced-size crawl spaces to provide more free space in utility rooms, the company reports. Octagon shaped heat exchanger is designed to assure freedom from expansion noises and combustion rumble, according to the manufacturer.

Wall Air Conditioners

"BUILT-IN-WALL" air conditioners in 1 hp capacities — AMIC Mfg. Co., 21-25 44th Ave., Long Island City 1, N. Y. Flush-mounted units are designed for compatibility with any architectural requirements and for silent operation, according to the manufacturer.



**Rheem has scooped all
the others for '56! . . .**

**with something mighty cool
in air conditioning**

**Watch for complete details
next month**

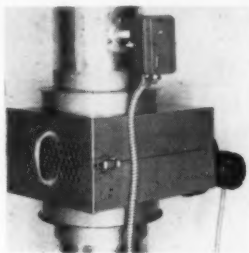
You can rely on



equipment developments

Waste Heat Recoverer

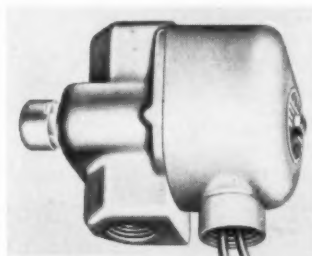
HEATER DESIGNED to recover waste chimney heat to warm basements, attics, playrooms and garages — Mi-



cro Scotch Heater Corp. Div., Micro-Moisture Controls, Inc., 22 Jericho Turnpike, New York. Attached to furnace smoke pipe, heater directs heat ordinarily wasted into areas desired. Unit weighs 40 lb., measures $11\frac{1}{2} \times 14\frac{1}{4} \times 12$ in., has small motor, 150 cfm fan and a core of brazed hollow steel tubes enclosed in a heavy gage housing. Hot gases from the furnace pass over tubes which are said to withstand temperatures up to 2000 deg. Blower is activated when stack temperature climbs above 350 F. Safety device permits furnace gases to escape if tubes become clogged with soot. Removable core is cleaned by spraying with garden hose.

Gas Valves

SERIES 925-926 GAS valves with optional manual opening device designed to permit operation of a gas



furnace when electric power supply is interrupted — Penn Controls, Inc., Goshen, Ind. Opener is available on

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SOON!**

BIG J

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THE WAY!
with great, new
profit potential
FOR YOU!**

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- **TOO TOUGH FOR VENTILATION**
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Ideal for laundries • foundries • dry cleaners • factories • warehouses • florist shops • restaurants, etc.

"Hopeless" cooling problems are easily and economically solved with PALM-AIRE or SNO-BREZE evaporative air coolers. Great volumes of filtered, cooled air clear out sweltering heat in large-area hot spots. Research *proves* that morale and working capacity go up as the temperature goes down... an installation soon pays for itself in startling production increases!

And best of all, top-quality Palm-Aire and Sno-Breze coolers are low in initial cost, operate for next-to-nothing!

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BOOKLET--
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TODAY**



equipment developments

1/2 and 3/4 in. gas valves, which are said to provide gas capacities of 267,000 and 366,000 Btuh, respectively. Device consists of a knob at valve bottom which controls valve opening when manual control is desired. Turning knob to unlatch position returns valves to automatic operation.

Oil Fired Water Heaters

COPPER LINED, glass lined or galvanized water heaters in 30 gal capacities — Quiet Automatic Burner Corp.,



33-35 Bloomfield Ave., Newark 4, N. J. Burners use No. 2 oil taken from same fuel tank that supplies the furnace; nozzles are rated at 1 gph. Glass lined and galvanized units have 100 gph recovery rating; copper lined model recovers 118 gph. Model 30G (glass lined) has magnesium anode. Galvanized units, with two anode rods, are also available in 40 gal models.

Gas Fired Furnaces

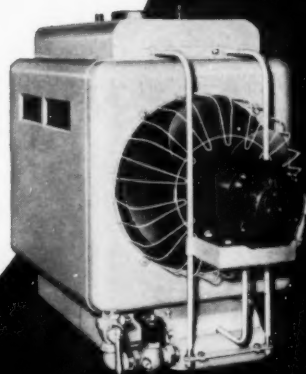
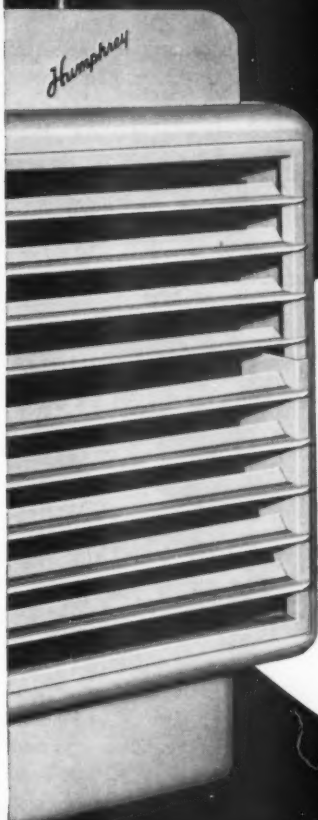
MODELS GH89D AND GH89VT high-boy gas fired furnaces rated at 90,000 Btu input—Perfection Industries division, Hupp Corp., 7609 Platt Ave., Cleveland 4, O. Model GH89D has single speed, direct drive blower, single port cast iron burner and automatic gas valve with safety pilot. Model GH89VT has "Regulaire"

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These Humphrey Unit Heaters give longer and better service with less attention and less expense than any other kind of industrial or commercial heating equipment. They are quiet, clean, good-looking, and so versatile that they are used in every conceivable type of store, office, factory and institution.

When you handle the Humphrey line, you are selling the world's best unit heaters—and that pays off, in larger sales volume, greater customer satisfaction, and smaller service expense.

Choice of Propeller Fan or Blower

6 sizes, from 65,000 to 250,000 b.t.u. input, with choice of blower or propeller fan—a total of 12 models. Blower type approved under latest AGA requirements for use with ductwork.



COMPACT MODEL 40-G

Cabinet only 17" x 22 3/4" x 13 1/4". Rated input, 40,000 b.t.u. Propeller type fan, full safety controls.

Numerous OPTIONAL FEATURES

Difficult or unusual installations are made easy by use of the wide variety of optional equipment available, including automatic controls, vertical louvers, cold air return, 90° warm air outlet, etc.



GENERAL GAS LIGHT CO. • KALAMAZOO, MICH.
Originators of Gas Unit Heaters



For fast cuts and easy handling— *Hand shears can't compete with* **UNISHEAR**

The best man in your shop couldn't match a pair of hand shears against the speed and accuracy of Stanley's U216 Portable Electric Unishear.

First, he'd be beaten in length of cut. In one minute, Unishear U216 trims 20 feet of 14-gauge mild, hot rolled steel; other models cut from 18 to 6 gauge.

And he'd take a licking on accuracy, too. Unishear's improved blade action cuts straight lines,

curves, angles and notches smoother, more accurately than any hand method. The operator finds it easy to handle — self-feeding jaws do the cutting.

To lower production costs, save fabricating time and make cutting jobs easier, get a Stanley Unishear for your shop. Choose from six portable and three stationary models. For more information write Stanley Electric Tools, 571 Myrtle Street, New Britain, Conn.

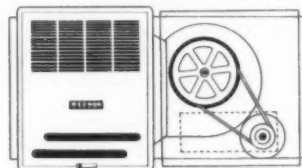


equipment developments

blower said to tailor the amount of heat delivered to the amount present in the plenum chamber, a three stage fire, and single port burner. Both models are 59 7/16 in. high; casings are 22 gage steel.

Conversion Equipment

NECESSARY EQUIPMENT for conversion of Series D duct furnaces into automatic heating units — Reznor Mfg. Co., Mercer, Pa. Added equip-



ment includes blowers, blower enclosure which can be used as plenum chamber, louver ends, filter case and thermostats for 24 or 115 volt control systems. Addition of the supplemental equipment converts the duct furnace, which is actually a gas fired heat exchanger with combustion controls, into a complete furnace with ducts or a unit heater without ducts. Assembled with blower and blower enclosure and designated model DBF, unit is said to be suitable for use as a horizontal furnace. Centrifugal blowers have 9 in. wheels; variable speed motor pulleys adjust for any desired cfm. Blower may be mounted on either end of furnace; air can flow in either direction. Filter case accommodates one 20 X 20 in. filter.

Kitchen Ventilating Fan

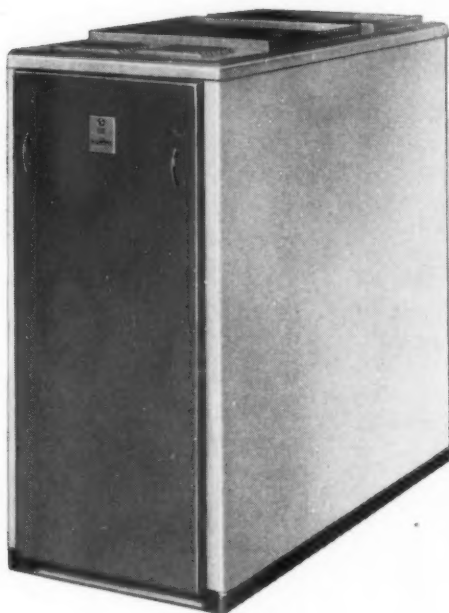
CEILING OR WALL mounted 8 in. kitchen fan with pressure type blades and shallow housing which accommodates a 3½ X 8 in. rectangular duct — Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. Fan delivers 700 cfm. Optional equipment includes rectangular wall cap and weatherproof cap designed for installation on varying pitch roof.



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equipment developments

Air Cooled Condensers

AIR COOLED CONDENSERS in 2 through 20 ton sizes — Halstead & Mitchell, Bessemer Bldg., Pittsburgh 22. Coils are designed to provide high air volume at low fan speeds; units are available with aluminum or copper



fins. Condenser cabinets have three coatings of water resisting materials. Condensers may be either floor or ceiling mounted and are designed for multiple-circuit operation. Wind deflectors are available for outside applications.

Plastic Blower Wheel

"DESCO" ONE PIECE molded plastic blower wheel designed for quiet operation and close balance tolerance — Denbo Engineering and Sales Co., Inc., 3301 Martindale Ave., Indianapolis 18. Lightweight unit is corrosion proof, dynamically designed for increased performance, and dimensionally constant, according to the company. Individual balancing and finishing or painting for corrosion protection are eliminated because of the wheel's one-piece, molded design, the company states.

Window Air Conditioners

"DELUXE" AND "CUSTOM" lines of window air conditioning units ranging from 1/2 to 1 1/2 hp and from 3/4 to 2 hp respectively — O. A. Sutton Corp., 1812 W. Second St., Wichita 2, Kans. "Deluxe" models can be mounted flush with the window. User can control air circulation,

Switch to - - LINCOLN



Gas-Fired and Oil-Fired Furnaces and Air Conditioners

COMPLETE LINE — size ranges from 75,000 to 180,000 B. T. U. output at bonnet.

COMPLETE PACKAGE UNITS — factory assembled and tested — ready to install.

10 YEAR WARRANTY — on both the combustion chamber and heat exchanger.

MAXIMUM HEAT TRANSFER — assured by high efficiency 12 gauge steel heat exchanger.

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COMPETITIVELY PRICED — every unit priced to meet today's competitive market.

Exclusive distributor and dealer franchises are available in certain desirable areas. Inquiries are invited.

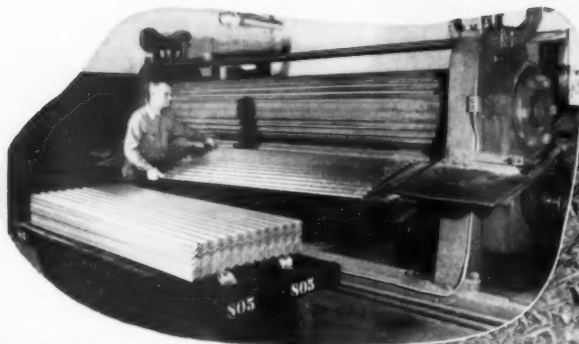
WRITE FOR FULL INFORMATION

LINCOLN FURNACE Co., Inc.

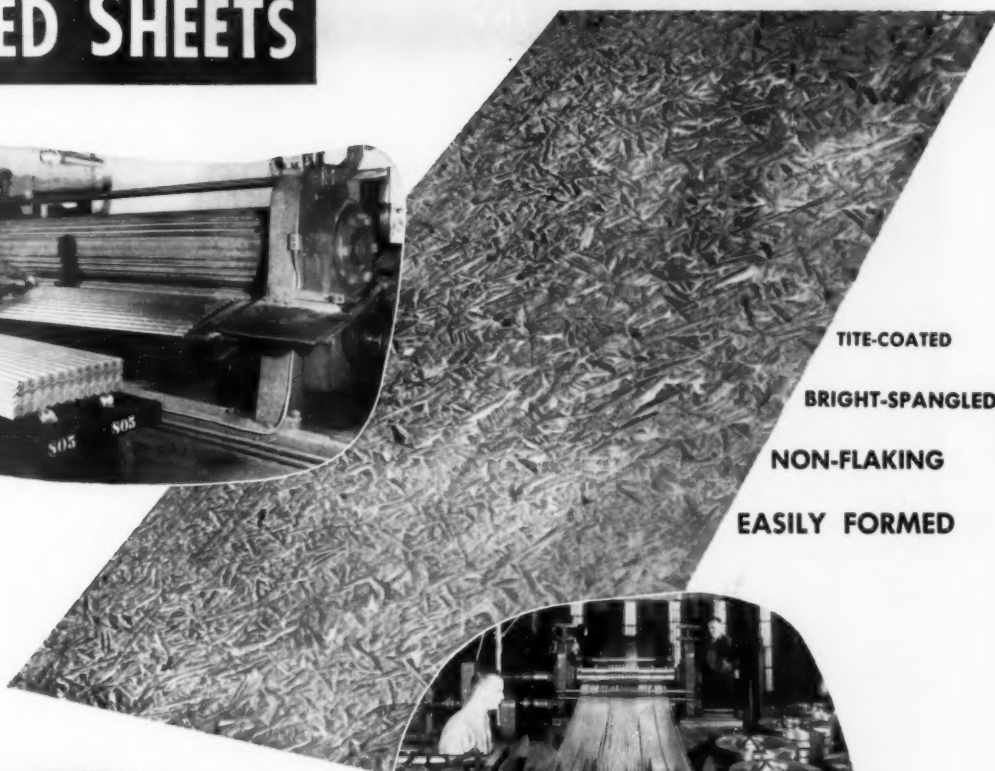
MANUFACTURERS OF GAS & OIL FURNACES AIR CONDITIONERS

230 Goffle Road • Hawthorne, N. J.

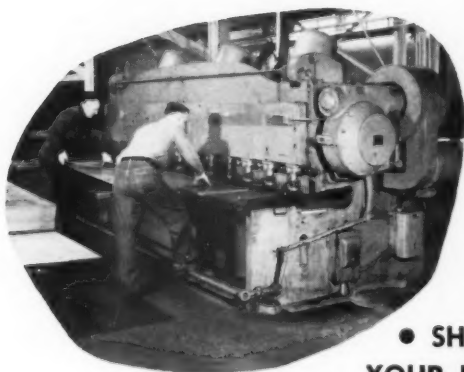
GALVANIZED SHEETS



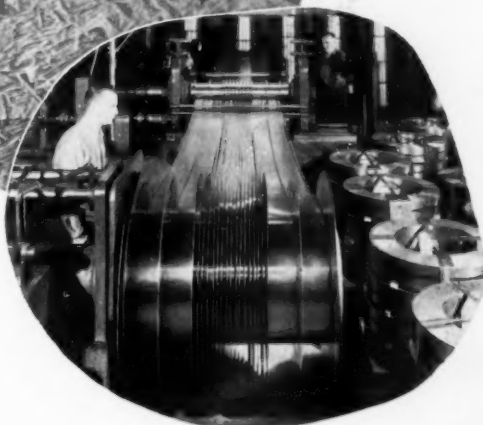
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HOT ROLLED STRIP
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HOT ROLLED PICKLED STRIP
GALVANNEALED SHEETS

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Skuttle FEATURES
 and you'll sell more!



Model 450

Skuttle

UNIVERSAL HUMIDIFIER
 WITH VAPOGLAS PLATES

Only Skuttle is mounted outside heating plant casing. Easily installed. Saves time.

Up to 460 square in. evaporating area with Vapoglas plates. Means more efficiency.

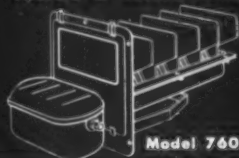
Maintains lower pan temperatures. Less lime in water and less clog.

Skuttle's exclusive plate design allows unrestricted air-stream.

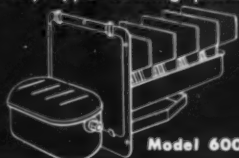
For further information, write to:



There's a Skuttle humidifier for every type heating plant



Model 760



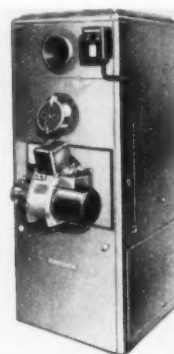
Model 600 B

equipment developments

operate the unit and maintain even temperatures with a single control knob, according to the company. "Custom" models can be mounted on a portable table stand, mounted flush inside or outside or in between, or through the wall. Push button panel is on the front of the unit behind access door. Casement models in $1\frac{1}{2}$ and $\frac{3}{4}$ hp ratings are also available.

Oil Fired Furnace

"Lo-Hi-Boy" MODEL OH-90V oil fired furnace rated at 90,000 Btu output — Perfection Industries Div.,



Hupp Corp., 7609 Platt Ave., Cleveland 4, O. Return air connection can be made at left or right sides or at the bottom. Cushioned burner uses No. 2 fuel oil. Controls are accessible from the front; blower assembly slides out on tracks. Blower is also suspended on rubber mounts.

Reversible Roof Ventilator

REVERSIBLE ROOF VENTILATOR which moves air in either direction — Hartzell Propeller Fan Co. Div., Castle Hills Corp., 1025 Roosevelt Ave., Piqua, O. Units are in 28, 36 and 44 in. sizes with exhaust capacity range from 5500 to 23,600 cfm and intake range from 5340 to 22,300 cfm. Unit can be installed on flat or sloping roof or on peak of roof. Optional equipment includes wire mesh intake guards and motor or manually operated dampers.

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Customers say it so much better

"For the past six years I have been dealing with various manufacturers and suppliers and I can truthfully say that I have never had such co-operation and genuine desire to give the very best of service as I have enjoyed from your company personnel."

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After 36 years in the blower business, we are expected to provide the best in air handling equipment. But, it's service to every customer, large or small, that keeps us growing.

That's why we appreciate hearing things like this from our customers. It lets us know that Brundage service is up to the standards we strive for.

We'd like an opportunity to serve you in the same way.

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FURNACES

Really engineered! That's what you'll say about HEATWAVE Gas-Fired Furnaces, including central heating systems or floor furnaces. Heatwave design and features reduce initial costs, cut installation costs, and provide you with satisfied customers through the years!

EVERY HEATWAVE MODEL

- FACTORY ASSEMBLED
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- SMART IN APPEARANCE
- ECONOMICAL TO OPERATE
- TEN-YEAR FACTORY WARRANTY

ABOVE: The Heatwave Counter-Flo, for perimeter and under floor heating. Can be installed in closet, alcove or utility room with minimum of duct work. Very economical installation. BTU Input: 80,000, 100,000, 120,000.

THE HEATWAVE FLOOR FURNACE

The whisper-quiet operation and efficiency of the Heatwave Floor Furnace makes it the favorite. It is unequalled either for economy or long life.

BTU INPUT: 27,500 35,000
50,000 65,000 75,000



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Houses • Write or Wire • Get The Facts!

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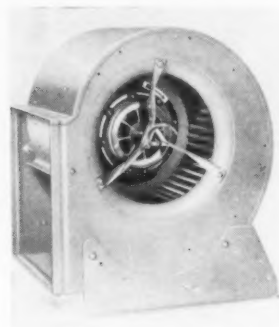
BOX 151 • Subsidiary of The F. E. Myers & Bro. Co. • AURORA, MO.



equipment developments

Direct Drive Blower

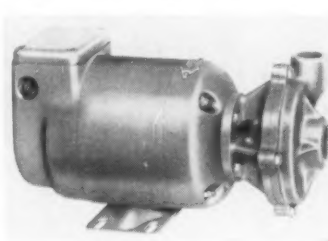
"ELECTRO-WHEEL" direct drive blower with 1/4 hp motor mounted completely within the blower wheel — Lau Blower Co., 2005 Home Ave.,



Dayton 7, O. Stationary shaft is rubber encased on both ends; blower has unobstructed air inlets on both sides of the wheel, the company states. Unit is said to give air deliveries from 500 to 1500 cfm, static pressure from 0.5 to 1.25 in. WG. Blowers are in 5 sizes with 9 and 10 in. wheels. Housing supports which can be mounted in pre-punched holes for any angle of discharge are available with the units.

Evaporative Cooler Pump

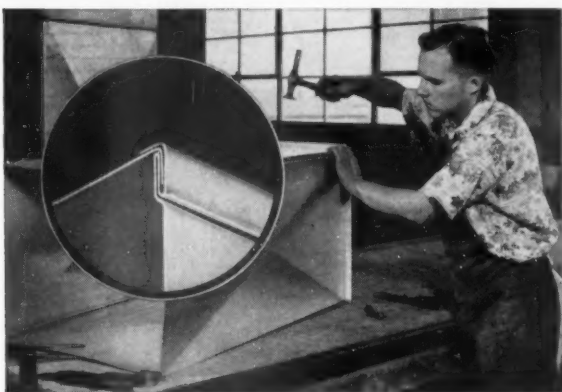
MODEL D-500 "Rumaco" 1/20 hp centrifugal pump for evaporative coolers — Ruthman Machinery Co.,



1809 Reading St., Cincinnati 2. Equipped with self-adjusting seal, the unit is designed for mounting at any convenient point in horizontal, vertical or angular position without restriction to high level line of liquid in the reservoir, the company states. Discharge relation is interchangeable in four 90 deg positions; pump is



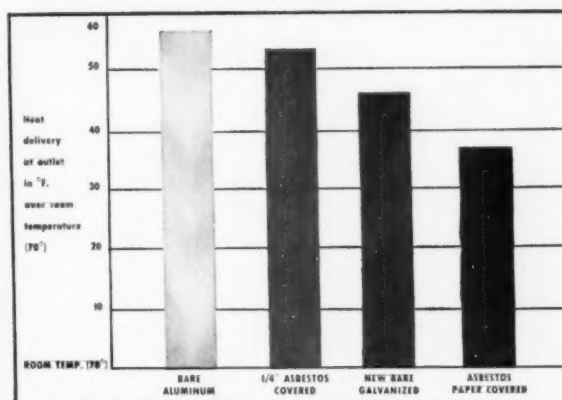
One pound of Kaiser Aluminum sheet covers the same area as three pounds of galvanized. And aluminum's smaller heat-carrying ducts save metal and fabrication. No waste from edge shearing or trimming. Additional savings if utility sheet is used in coiled form, cut to prescribed lengths.



Takes perfect Pittsburgh lock seam! Can be fabricated by same methods and equipment as galvanized. No metallic coating to chip or peel during bending. Aluminum's appearance blends with the modern architecture of offices and stores without additional costly finishes.



Saves 10% to 12% in installation costs because aluminum duct can be handled with greater speed and efficiency, and with less fatigue. Long sections can be assembled on the floor and lifted into place without the aid of heavy scaffolds or expensive hoisting equipment.



Delivers 17% to 46% more heat than bare or asbestos paper-covered galvanized due to aluminum's low emissivity, low friction loss, and high thermal reflectivity. Same BTU delivery with as much as 14% smaller duct sizes. Needs no insulation. High corrosion resistance eliminates painting or other protective measures.

For better ductwork at lower cost... think of *Kaiser Aluminum*

In air conditioning and heating duct, compare aluminum's advantages over galvanized: greater coverage per pound—savings in handling and erection—increased efficiency and lower fuel bills—less maintenance. They add up to: *better ductwork at lower overall cost.*

For complete information, contact any Kaiser Aluminum sales office, located in principal cities, or one of our distributors. Kaiser Aluminum & Chemical Sales, Inc. *General Sales Office*, Palmolive Bldg., Chicago 11, Illinois; *Executive Office*, Kaiser Bldg., Oakland 12, California.

Send coupon for free folder. Helps you take full advantage of aluminum's unique combination of properties. Availability charts on Kaiser Aluminum Utility Sheet in both flattened and coiled sheets, including thick-

nesses, weights, etc. Also contains weight and coverage comparisons for aluminum and galvanized.

MAIL COUPON TODAY!

Kaiser Aluminum & Chemical Sales, Inc.
Kaiser Building, 1924 Broadway, Oakland 12, California.

Please send _____ free copies of folder entitled
"Kaiser Aluminum Utility Sheet."

Name _____

Company _____

Address _____

City and State _____

HERBSTER CAST IRON GAS FURNACES

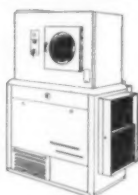
with the

Lifetime Guarantee!

● Herbster has a practical, tested plan that has helped hundreds of furnace dealers and distributors on the road to a bigger bank balance. This plan is based on Herbster revolutionary, venturi-type, cast-iron construction . . . with a **LIFETIME GUARANTEE**. Sales plan actually shows how to up-trade customers from a cheaper steel furnace to the quality cast-iron Herbster furnace. It permits you to make a more liberal profit on every furnace you sell. Mail coupon for complete information.

COMBINATION GAS FURNACE AND CLOTHES DRYER ▶

Exclusive patented Herbster product. Standard lowboy gas furnace with an economical clothes drying attachment. Dries clothes in half the time. Will not shrink, scorch or yellow clothes. A marvelous selling feature. 100 and 120 models. Shipping weight 595 lbs. 42" x 25" x 65½".



▶ HIGHBOY

A compact powerful furnace for small homes. Lifetime guarantee on the heat exchanger. 85 model. Completely assembled and fire-tested. Shipping Weight 295 lbs. 18" x 26" x 58¾".

▶ LOWBOY

Never before such economical operation! Sixteen radiating surfaces on a patented cast iron heat exchanger. 100 and 120 models. Completely assembled and fire-tested. Shipping weight 440 lbs. 42" x 25" x 37½".



DISTRIBUTORS, AGENTS AND DEALERS WANTED . . . MAIL COUPON

Herbster still has a number of open sales territories — golden opportunities for reputable agents, distributors and furnace dealers. Mail coupon for complete details.

HERBSTER FURNACE COMPANY
877 Addison Road, Cleveland 3, Ohio

Name
Company
Address
City State
Please check ☐ Distributor ☐ Agent ☐ Dealer

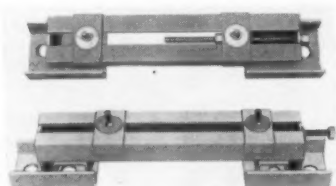
**The Furnace with something
to sell BESIDES PRICE!**

equipment developments

in cast iron or bronze. One-piece motor shaft rotates on two ball bearings.

Motor Isolation Base

"DUPLEX SLIDE-RAIL" motor base with attached slide mechanism designed to isolate noise and maintain proper belt tension — Korfund Co.,



Inc., 48-15 32nd Pl., Long Island City 1, N. Y. Slide mechanism is located within the base, eliminating protruding parts, the manufacturer reports. Use of individual rails permits using the same base with several motor sizes; six standard base sizes accommodate 29 different motor sizes.

Industrial Axial Fans

SERIES 203 tubeaxial and vaneaxial fans for industrial ventilation, process air supply and process air recirculation — American Blower Corp., Detroit 32. Featuring universal mounting and straight line air flow, fans have cylindrical casings to permit installation in a minimum of space in ducts. Fans can be mounted for vertical or horizontal air flow, and on wall, ceiling or floor. Tubeaxial fans are direct drive units, feature large diameter hub and die formed blades designed to give uniform air velocity from hub to tip. Vaneaxial fans are in direct or V-belt drive units; V-belt type has externally mounted motor with protected belts, permitting use of fan to handle slightly contaminated air up to 150 F, the company states. Tubeaxial fans are in 12 sizes with free deliveries up to 68,000 cfm. Direct drive vaneaxial fans, also in

STAND BY FOR THE

BIG

PEAK-ENGINEERED TO NEW, QUALITY STANDARDS IN OIL-HEATING!

BIG

WILL SAVE THE DAY!

IT'S THE BIG NEWS IN THE OIL-FIRED FIELD

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**Sell Comfort
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Install Zone Control Systems

For Heating and Air Conditioning

the Economical

CRISE

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ZONETROL Way



Crise Zonetrol units may be purchased individually or in packages including the thermostat and linkage.

Zone control is now within the budgets of hundreds of your customers who have always wanted this comfort and convenience.

Simplicity is the big feature of the Zonetrol. Each is a complete, easy-to-install self-contained unit. *No expensive master controls, power boxes or transformers are required.* Just install a Zonetrol

on the duct leading to the zoned area. Then, in response to thermostatic control, it will open or close the duct damper and, at the same time, start or stop the heating equipment . . . automatically.

For additional information and prices see your wholesaler or write us.

ACRO
MANUFACTURING COMPANY

CONTROLS DIVISION

COLUMBUS 16, OHIO

HEILites

From Joseph F. Heil
President of The Heil Co.



This is the first of a series of columns dealing with some of the interesting things that are happening in our industry and at Heil. The timing seems particularly appropriate because, as you and I know, our industry is really "on the move"; more things are happening than ever before.

And, when I say "our industry" let me make it clear that I am referring not only to the manufacture of heating and cooling equipment, but to the great wholesaler system that is contributing so much to the health, happiness and general welfare of all America and all Americans. We at Heil are particularly conscious of this contribution because our lot has been cast with the wholesaler method of distribution. And we are happy to see it develop and move in the right direction, as it has been doing.

But despite the progress, we still hear occasional chants from that old refrain "let's cut out the middle man". A lot of people still do not understand the *essential* nature of the heating and air conditioning wholesaler. Nor do they appreciate that the wholesaler's functions *must* be performed. There just isn't any way around them.

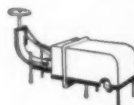
Sincerely yours,

Joseph F. Heil.
President

THE HEIL CO.

3081 W. Montana St., Milwaukee, Wis. • Hillside, N.J.

Support Your HEIL Wholesaler
Work With Him . . . and Profit!



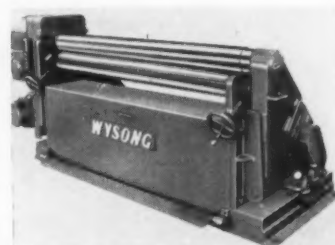
SALES OFFICES:
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Kansas City, Mo.;
Denver, Colo.;
Dallas, Texas;
Los Angeles, Calif.;
Seattle, Wash.

equipment developments

12 sizes, produce up to 58,500 cfm;
V-belt drive units are 51,000 cfm.

Bending Rolls

SERIES D all steel 6 in. bending rolls
in 48, 60, 72, 96 and 120 in. lengths
— Wysong & Miles Co., 625 Fulton



St., Greensboro, N. C. Featured in the initial or pinch type rolls are parallel adjustment of forming roll by a hand wheel, and a safety treadle which extends full length across the front and stops the machine on foot contact. Single lever releases the drop end; all three rolls are power driven. Drive is by a 7 1/2 hp, 1800 rpm motor. Worm gear drive runs in bath of oil.

Vacuum Tank Kit

HEAVY DUTY AUXILIARY tank kit for volume work in furnace cleaning where large wet and dry tank capac-



ity is called for — Premier Co., 755 Woodlawn Ave., St. Paul 1, Minn. Hose adapters, swivel attachment

THE COMPLETE HEATING SUPPLY HOUSE

OFFERING ALL APPROVED BRANDS OF

ATTIC FANS
BOILER CEMENTS
BLOWERS
CLEANERS
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FURNACES, ALL FUELS
GAS BURNERS
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WATER HEATERS
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PHILIP CAREY ASBESTOS PRODUCTS

"FIBERGLAS" "KAYLO" & "ULTRALITE"

UNIBESTOS & AMOCEL

REPAIR PARTS

FOR ALL
FURNACES, BOILERS
AND
OTHER HEATING UNITS



WE SPECIALIZE IN GENUINE REPAIRS
WE ALSO CARRY AIR CONDITIONING OF ALL TYPES

A. G. BRAUER SUPPLY CO.

2100 WASHINGTON AVE.

ST. LOUIS 3, MO.

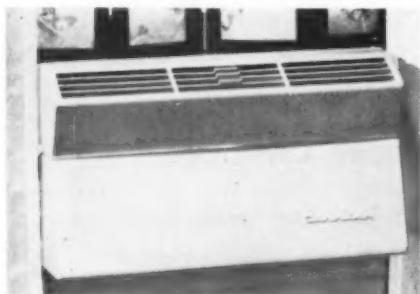
equipment developments

(Continued)

nut and ring, curved tube, curved swivel tube, gaskets, bolts and nuts are included to comprise the kit that converts a standard 30 gal waste can into an auxiliary tank which is connected ahead of the vacuum; bulk of the waste material is collected in the auxiliary tank, the company reports. Unit operates with any commercial cleaner.

Room Air Conditioner

INTERNATIONAL" LINE of room air conditioners in 1/2, 3/4, 1 and 1 1/2 hp models — Carrier Corp., 300 S.

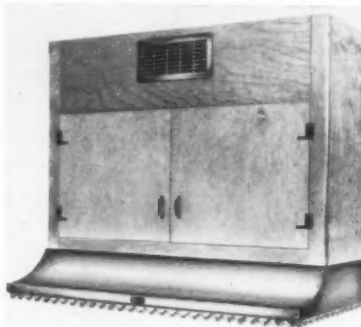


Geddes St., Syracuse 1, N. Y. Power factor has been increased over previous models, the company reports.

"Weatherarmor" cabinet is heavy gage bonderized steel designed to provide a rust-proof paint base in any climate. Window seal is designed to lock out drafts and air leakage.

Kitchen Ventilating Hood

"SALEM" COPPER kitchen ventilating hood in 30, 36, 39, 42, and 48 in. lengths — Trade-Wind Motorfans,



Inc., 5725 S. Main St., Los Angeles 37. Fabricated from a laminated sheet of solid copper and steel, hood has antique copper finish to match modern stoves. Detail of scallops is carried around the base of the hood while curving top panel is fastened to side members with exposed rivets.

AT IT SINCE '02

FLUXES
SODERING
BRAZING & WELDING

ALLEN

L. B. ALLEN CO. INC. Chicago 31, Ill.

FREE INTRODUCTORY OFFER — Tell us on your letterhead what samples you want, and what metals you solder, samples will be sent free of charge. Check samples here, and attach to your letterhead.

- ☐ 1 Soldering Salts
- ☐ 2 Soldering Paste
- ☐ 5 Stainless Steel Soldering Flux
- ☐ 6 Soldering Liquid
- ☐ 11 Solid Sal Ammoniac
- ☐ 18 Aluminum Soder



ALLEN SPECIAL STAINLESS STEEL SODERING FLUX

(Item 5)



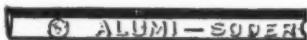
Here's a remarkable fast flux that makes the soldering of stainless steel as easy as soldering tin plate. (Also available in a special odorless formula where less strength is required). "ALL-SOL" works with all solders but for best results use Allen stainless steel soder, pints, gallons.

ALLEN ALUMINUM SODER

(Item 18)

Allen Alumi-Soder is a complete soder and flux combined. Requires only heat to permanently join aluminum to itself or other metals. Comes in 1/4" square wire form and triangular 1/4 lb. and 1 lb. bars. Also in popular trial size pieces, called test pieces, 1/4 lb. and 1" bar and wire form.

Also soders cast-iron.



ALLEN SODERING PASTE

(Item 2)



Standard Formula, Safest soldering paste made—fast working—a convenient corrosion-free, soft form of flux. Adheres to the surface while you soder. Assures secure electrical and mechanical joints. Saves time. Triples strength of the soder. Makes soder self-fluxing. Official National Underwriters Laboratory approved listing. 2, 4, 8, 16 oz.



ALLEN SODERING LIQUID

(Item 6)

Standard Formula. For All-around work, for all metals save aluminum and stainless steel. 17,000 pounds to the square inch with no gumming, fumes, or corrosion. Double strength, non-evaporating. Works like Lightning. Adaptable to hand or machine soldering. Excellent for tinning the soldering copper. 2 oz., 4 oz., quarts and gallons.

ALLEN SOLID SAL AMMONIAC

(Item 11)



Speedily cleans and brightens the soldering copper. Outlives fibrous lump many times.

Six sided, solid, convenient. Does not crumble, nor corrode metal work, nor tools on the job.

L. B. ALLEN CO., Inc.
6702 Bryn Mawr Ave., Chicago, 31, Ill.

NIAGARA

meets the need for a low-cost
quality furnace with the

ALL NEW

NIAGARA

Series 70

FORCED AIR FURNACE LINE



Model G-70-100FA

Model O-70-100FA

**Fully Automatic
GAS OR OIL MODELS**

**9
DIFFERENT
OIL-FIRED MODELS**
FROM
.75 g.p.h.
to 1.5 g.p.h.

**15
DIFFERENT
GAS-FIRED
MODELS**
FROM 50,000 BTU
to 140,000 BTU

**HIGH BOY—
DOWN FLOW—
BASEMENT
MODELS**
to fit ANY
HOME HEATING
REQUIREMENT

**NEW
Construction Features**

- Compact Efficient Design
- Modern Styling
- Completely Assembled
- Completely Wired

NEW HEAT EXCHANGER

- Cylindrical in shape—made entirely of 14 gauge steel

Direct or Belt Driven Blowers

- Small-size furnaces equipped with direct-drive, center-motor-mount twin wheel blower.
- Belt-drive blowers optional on all models.

OIL MODELS
equipped with famous
**NIAGARA
OIL BURNER**
with the
Supra-Flame Head

**SELECTION
OF CONTROLS**

Choice of A.G.A. approved
Honeywell, Standard
or Self-generating
controls.



HERE'S A PROFIT BUILDER FOR YOU

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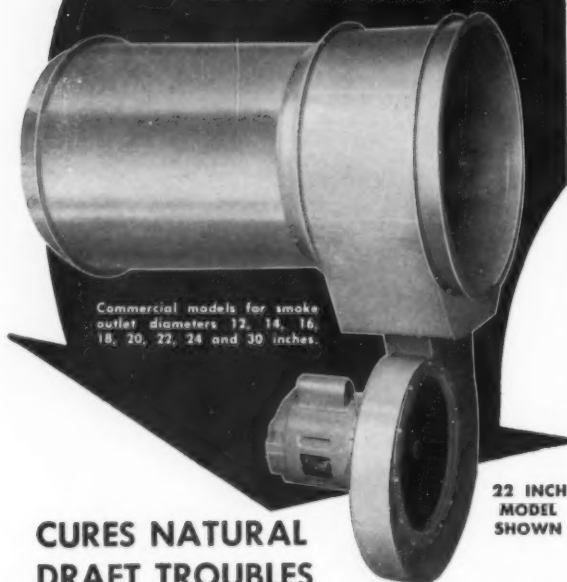
NIAGARA FURNACE DIVISION

THE FOREST CITY FOUNDRIES COMPANY

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NIAGARA—the word for maximum heat at minimum cost.

Quickdraft



CURES NATURAL DRAFT TROUBLES

Increasing concentration of carbon and sulphur dioxides in the atmosphere, recently reported by scientists, handicaps ordinary chimneys by decreasing natural draft (CO_2 is 55% and SO_2 is 225% heavier than air) . . . and by demanding more draft because additional air is required to provide sufficient oxygen. In addition, current trends constantly demand more draft . . . (1) new fuels that require more oxygen . . . (2) longer flue travel in furnaces and boilers. As a result, more and more heating plants operate at low efficiency because of gravity draft troubles.

WITH POWER DRAFT THAT ASSURES HEATING PLANT EFFICIENCY . . . No Fans or Motors in Smoke Line

Quickdraft power draft stops sooting, eliminates chattering, dries wet chimneys and greatly increases combustion efficiency. It does not obstruct smoke line with fans or motors. Quickdraft assures top performance from old and new heating plants. All models are approved by Board of Standards and Appeals, New York City. Write today for details.



Residential models for smoke outlet diameters 6, 7, 8, 9 and 10 inches.

N-288-QD

Quickdraft
COMPANY
Canton 1, Ohio

QUICKDRAFT COMPANY
Dueber-Hampden Building
P. O. Box 87-D
Canton 1, Ohio

new literature . . .

Packaged Air Conditioners

REDESIGNED LINE of water cooled packaged air conditioners for stores, restaurants, office buildings and factories are illustrated and described in a consumer directed brochure — Airtemp Div., Chrysler Corp., P. O. Box 1037, Dayton 1, O. The booklet contains illustrations of components and complete units as well as diagrams showing various ways in which the units may be installed — set out in the space to be conditioned; built into shelving, cabinets, recesses or alcoves; or placed in an area that is partitioned and where duct work is required to carry the conditioned air to other spaces. Specifications are given for nine models ranging in size from 2 to 30 hp.

Air Distribution Duct and Fittings

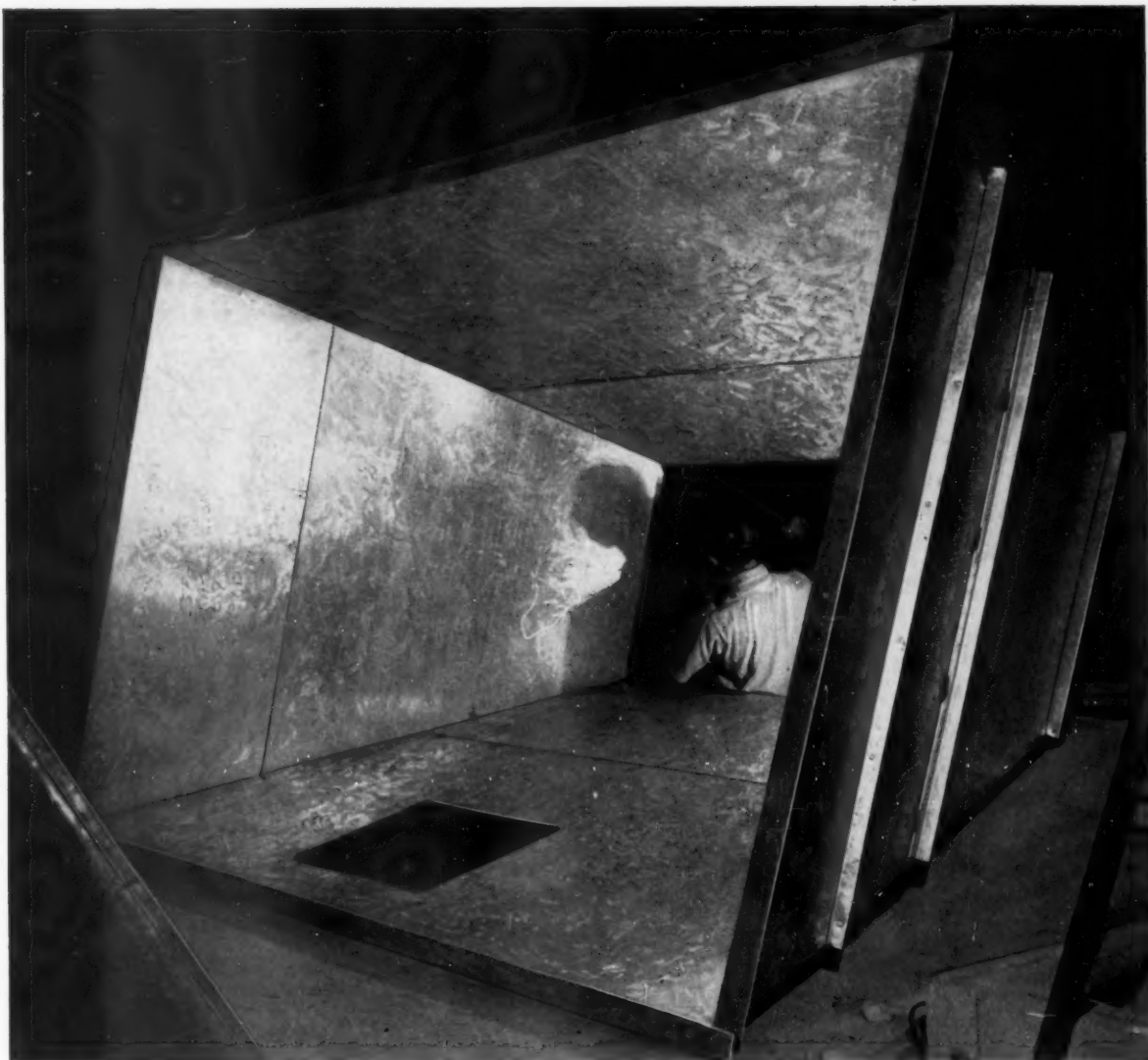
AIR DISTRIBUTION duct and fittings catalog for wholesalers and dealers includes data on types of systems, assembly information, and basic information on warm air heating — Clayton & Lambert Mfg. Co., 1025 Lamneck St., Middletown, O. The catalog utilizes a new format designed to facilitate reference. Each fitting is illustrated.

Air Cooled Condensers

REMOTE AIR COOLED condensers for use with air conditioning systems where no cooling water is available, water costs are high, or disposal of surplus water is a problem are described in bulletin AC-100—Halstead & Mitchell, Bessemer Bldg., Pittsburgh 22. Information is given for eight models with capacities ranging from 2 to 20 tons. A table of performance data for various size units is included as well as a table outlining coil and fan data. Dimensions and weights of the units are given, as are sketches showing construction features and mounting arrangements.

Pushbutton Type Air Meter

BULLETIN No. 55 gives information on pushbutton type "Anemotherm" air meter, a self-contained portable unit for measuring air velocity, air temperature and static pressure in heating, ventilating and air conditioning systems — Anemostat Corp. of America, 10 E. 39th St., New York 16, N. Y. The unit may be used in ducts, free spaces, and at air inlets and outlets, and is suited for both field and laboratory work. The bulletin explains the operation of the meter and describes typical uses for it in various types of systems. According to the company, the meter measures velocities from 10 to 8000 fpm in increments as small as 5 fpm, temperatures to 225 F with an accuracy of about one-half of a degree, and static pressure directly



How Bethcon helps you do better sheet-metal work

Here we see part of the complex heating and ventilating system of a large department store in New Jersey. Tons of Bethcon galvanized sheets went into the fabrication of this system and contributed substantially to the quality of the installation.

You can do better sheet-metal work with Bethcon because Bethcon sheets are made by a continuous process of galvanizing, which binds the zinc coating more tightly to the steel than the conventional method. This extra-tight coating permits severe forming without danger of cracking or flaking off.

You will find, in addition, that Bethcon has brighter, more uniform spangles which present a more attractive appear-

ance. And the zinc is distributed more uniformly over the entire sheet, thus eliminating the bead normally found on the drip end.

If you have not yet worked with Bethcon galvanized sheets a chat with someone who has should prove interesting to you. We will be glad to give you the name of such a contractor in your vicinity. And, of course, we are ready at any time to discuss Bethcon with you ourselves. Just call or write to the nearest Bethlehem sales office.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation. Export
Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL



in terms of inches of water from 0 to 8 negative and positive with a sensitivity of better than 0.05 in. at lower range.

Calendar for Sheet Metal Contractors

CALENDAR FOR 1956 features reference tables of interest to sheet metal contractors — David Levow, 308 W. 20th St., New York 11. Included are tables giving diameters, circumferences and areas of circles; physical properties of metals; weights of copper nails; rules for mathematical calculations; thicknesses of copper; etc. Send request on company letterhead.

Oil Burner Electrode Assemblies

CATALOG E55 covers standard and special ignition electrode assemblies for domestic and commercial oil burners — William Steinen Mfg. Co., 43 Bruen St., Newark 5. The five standard models are divided into two groups of two each, all having 9/16 in. diameter insulators and a single type having a 7/16 in. diameter insulator. Special assemblies can be produced for applications where standard models cannot be used. The booklet lists oil burners which use the standard model electrodes and explains what information should be supplied in ordering.

Selection Table for Registers

SIX PAGE SELECTION CHART for dealers, contractors, architects and engineers, was designed to facilitate the selection of correct size heating and air conditioning registers — Waterloo Register Co., Inc., P. O. Box 72, Waterloo, Ia. Figures used in the table are based on recent laboratory tests of the company's four way directional control grille, which features "tear drop" design extruded aluminum louvers.

Air Conditioning Blowers

CATALOG covers "Rex" air conditioning blowers — Air Controls, Inc., 2310 Superior Ave., Cleveland 14. Seventeen standard belt-driven models are listed, each available for either top or bottom horizontal discharge, and up or down discharge. "Unipak" universal models may be used to obtain any one of four discharge angles by means of a specially designed adjustable base. It is made in six sizes. Five sizes of direct drive blowers are shown featuring twin wheels designed to provide better outlet velocity distribution and performance.

Air Diffusers

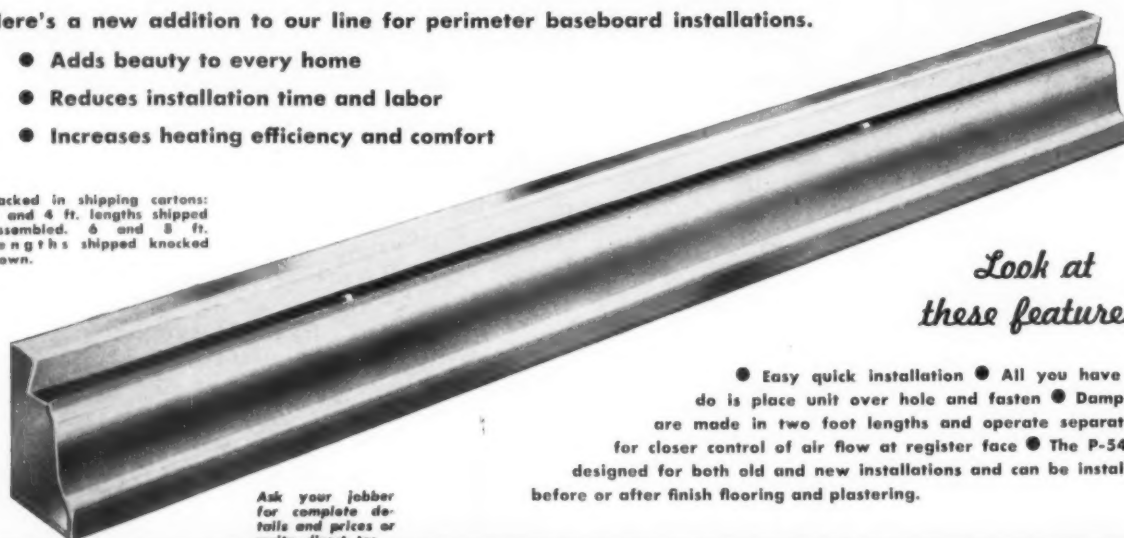
CONDENSED CATALOG is designed to acquaint air conditioning dealer-contractors, heating and ventilating engineers and architects with the features of "Multi-

For greater heating efficiency and savings **specify this NO. P-54 BASEBOARD DIFFUSER**

Here's a new addition to our line for perimeter baseboard installations.

- Adds beauty to every home
- Reduces installation time and labor
- Increases heating efficiency and comfort

Packed in shipping cartons:
2 and 4 ft. lengths shipped
assembled. 6 and 8 ft.
lengths shipped knocked
down.



Ask your jobber
for complete de-
tails and prices or
write direct to:

*Look at
these features:*

- Easy quick installation
- All you have to do is place unit over hole and fasten
- Dampers are made in two foot lengths and operate separately for closer control of air flow at register face
- The P-54 is designed for both old and new installations and can be installed before or after finish flooring and plastering.

THE A & A REGISTER COMPANY
8327 CLINTON RD. CLEVELAND 9, OHIO

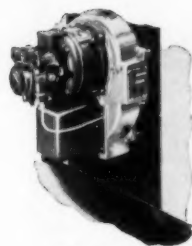
Yes...
We're Busy
at Beckett's!



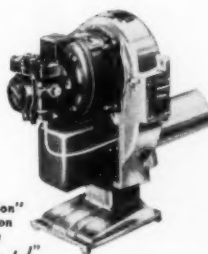
**Every Year of
Beckett Company History
Has Shown Steady Growth
in Volume.**

● Every year more and more
furnace and boiler units are
furnished with Beckett Burners
as standard equipment.

**There Must Be
A REASON!**



"Plate-Mounted"
for "Unit" applications
.75 to 6.0 gph.

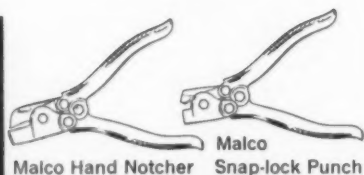


"Conversion"
companion
to the
"Plate-Mounted"
.75 to 13.0 gph.

R. W. BECKETT CORPORATION • Elyria, Ohio • On U. S. Route 20

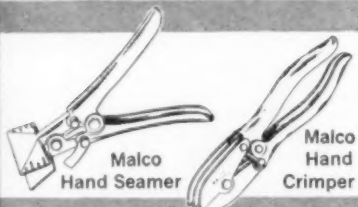
Malco QUALITY TOOLS

new!



Malco Hand Notcher Malco Snap-lock Punch

plus



Malco Hand Seamer Malco Hand Crimper

All with "compound leverage" to give you greater squeezing power with half the pressure.



Tough Tenite-2 plastic handle—polished tempered steel blade.



Malco Scratch Awl

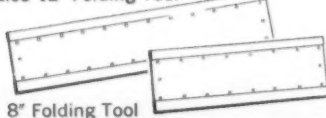
A new "helper" to hold pipe and ductwork.



Malco Pipe & Duct Holder Set

Both 12" and 8" tools form $\frac{1}{8}$ " and $\frac{1}{4}$ " folds.

Malco 12" Folding Tool



8" Folding Tool

New "chuck end" design. Fits all saws perfectly. Thicker, longer lasting blades for roughing. Full line —For every job and material.



Malco HEAVY DUTY Sawgun Blades

Contact your jobber or write today to...

Malco PRODUCTS
405 East 48th Street, Minneapolis 9, Minn.

new literature

(Continued)

Vent" air diffusers — Pyle-National Co., Dept. M-V, 1334 N. Kostner, Chicago. The catalog is divided into five main parts: 1) construction and installation details; 2) performance data; 3) sound level charts; 4) descriptions of "Modular" and "Unitary" air diffusers; and 5) a list of representatives and agents.

Air Recovery Panels

BULLETIN 106-D covers "Dorex Type G" activated carbon air recovery panels for removal of odors and vaporous impurities from recirculated air in comfort conditioning installations — Connor Engineering Corp., 500-5th Ave., New York 36. Performance and selection charts are included.

Automatic Controls

CATALOG of air conditioning controls features many new controls plus late improvements and changes — General Controls Co., 801 Allen Ave., Glendale 1, Calif. Included are the locations of the company's five major plants, seven warehouse and 40 factory branch offices serving the U. S. and Canada. Also available is a brochure entitled Color in Controls which tells how color increases water heater sales. The controls are offered with either gold or chrome dials, in a wide variety of colors.

Gas and Oil Heating Equipment

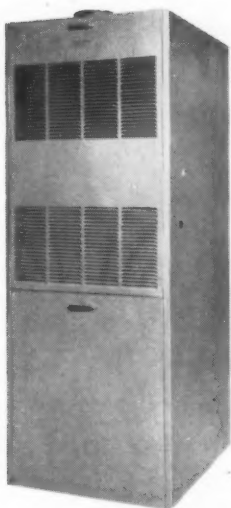
ILLUSTRATED HEATING GUIDE presents information on oil and gas fired furnaces and conversion burners — Thermo-Products, Inc., North Judson, Ind. Included is data on gas and oil lowboy, counterflow, highboy and floor furnaces as well as oil fired suspended counterflow models. Ask for catalog 75515.

Registers, Diffusers and Grilles

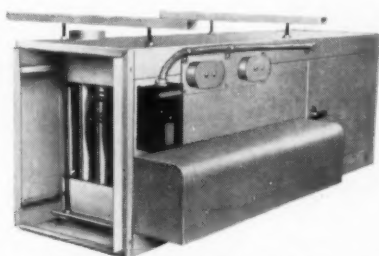
CATALOG 56-AC describes diffusers, registers and grilles for residential and commercial installations — Air Control Products, Inc., Coopersville, Mich. Featured are No. 20 series air conditioning registers and grilles, "Multi-Trol" commercial type registers and grilles, adjustable ceiling diffusers and "Out-of-the-Wall" diffusers. Capacities, sizes, engineering data and prices are given.

Reinforced Plastic Panels

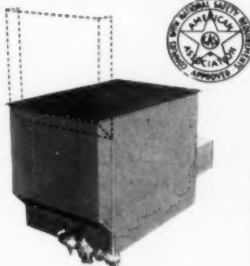
CIRCULAR describes "Security" panes composed of polyester resins reinforced with a blanket of glass fiber and a sheet of expanded steel lath — Resolite Corp., Zelienople, Pa. The panels are designed for such applications as safety screens for hazardous equipment or chemicals; glazing windows or small sky-



Compact upflow and counter-flow COZY forced air models give zero clearance; lets you use 4" piping or conventional ductwork. Has exclusive Heat Wringer. Adaptable for air-conditioning. 75,000, 105,000, 140,000 BTU input capacities.



Cozy Horizontal Forced Air, available in five capacities, 60,000 BTU to 140,000 BTU input. This space and money saver can be installed in attic, utility room, under floor...even without basement.



The COZY Challenger, the best buy in floor furnaces, has accessible controls.



COZY Wall Heaters available in four capacities; single or dual wall installation; three different temperature controls.

The ADVANCE FURNACE CO.
WICHITA, KANSAS

COZY

new literature

(Continued)

lights; and screening or partitioning industrial laboratories. They are available in 8 ft lengths and in 1, 2, 3 or 4 ft widths. A specification sheet shows composition, weight, thickness, load bearing capacity, colors available, etc.

Flexible Duct

BULLETIN 50 illustrates and describes applications of flexible duct in the metalworking industries — The Flexaust Co., Div. of Callahan Zinc-Lead Co., Inc., 100 Park Ave., New York 17. Recommended for use in grinding, polishing, buffing and similar operations, the duct is movable and durable as well as flexible. It is available in sizes ranging from 4 to 36 in. ID.

Rating Heating and Cooling Coils

BULLETIN 202 presents the standard prepared by the Heating and Cooling Coil Manufacturers' Association and the Air-Conditioning and Refrigeration Institute prescribing methods of testing and rating forced circulation air cooling and heating coils — Heating and Cooling Coil Manufacturers' Association, 2159 Guardian Bldg., Detroit 26. Test instruments, test apparatus, method of testing, data to be recorded, calculations, method of rating, thermodynamic properties and

heat transmission coefficients are among the subjects covered.

Multiple V-Belt Drives

MANUAL PRESENTS ENGINEERING standards for multiple V-belt drives recently revised because improvements in V-belts have resulted in greater belt strength with attendant higher hp ratings — The Rubber Manufacturers' Association, Inc., 444 Madison Ave., New York 22, or The Multiple V-Belt Drive & Mechanical Power Transmission Association, 27 E. Monroe St., Chicago 3. Basic changes in the revised manual include 10 pages of new hp ratings. These in general give increased ratings for standard quality belts throughout the generally accepted speed range; also, for the first time, ratings on premium quality belts are included. The new manual shows ratings for belt speeds from 200 to 6000 ft per minute. Copies are priced at \$1.00.

Air Sterilizing Equipment

AIR STERILIZERS for homes, offices, theaters, schools and similar applications are described in a four page circular — Iron City Chemical & Construction Corp., Glycolator Sales & Service Div., P. O. Box 5814, Pittsburgh 9. Illustrated are units designed for installa-

BRANDES* IS TOPS

... any way you look at it!

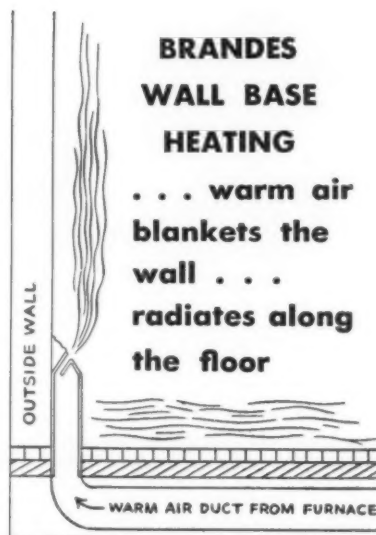
BRANDES WALL BASE HEATING

BRANDES will always be TOPS! Regardless of your needs, you're sure to find the model and size that exactly fits your requirements in Brandes expanded new line. Three distinct lines and a total of fourteen different sizes to choose from gives Brandes the most complete selection on the market today. With Brandes Wall Base Heating you get the ultimate in beauty and performance at reasonable prices, too!

*PATENTED

THE BRANDES COMPANY

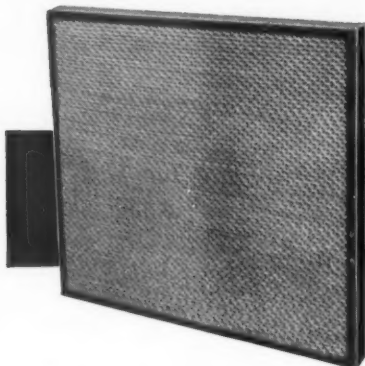
2046 WINNEBAGO ST., MADISON 4, WISCONSIN
Write for Catalog



STANDARDIZATION

OF ALL AAF 2" UNIT FILTERS

SPEEDS SALES — SIMPLIFIES INVENTORY



DESIGN C. Basic filter cell without handles for use in air handling devices which provide necessary supporting members for filter. Pre-fabricated die-cuts on each side are for attaching bail handles.



DESIGN A. Shows basic cell with bail handles attached, universal frame. Note spring latch on frame at right.

HERE'S the "grass roots" solution to making on-the-spot deliveries of unit washable filters to meet varying customer requirements:

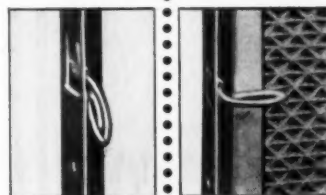
FIRST. Standardization of all AAF 2" unit washable filters—Types HV, M/W and A/C—at $\frac{1}{2}$ " under nominal size.

SECOND. Universal frames that fit any filter in the line.

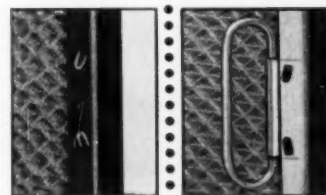
THIRD. Easily attached *spring latches* that lock any filter into universal frame.

FOURTH. Bail handles that can be quickly fastened to any AAF permanent filter cell.

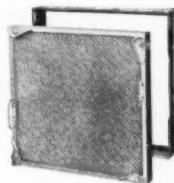
With a stock of the above, you have all the equipment needed to "custom-tailor" in your own shop the right type of filter for any 2" installation requirement. For complete information, call your local AAF representative or write us direct.



Spring latches are quickly inserted in die-cut in universal frame. A screw driver is the only tool needed. Then a "twist of the wrist" locks filter securely in place.



Closeup of cell side showing pre-fabricated die-cut tabs for attaching bail handles. Handles are easily attached by punching tabs through rectangular openings in bail handle hinge.



DESIGN B. This cell, equipped with factory-installed corner latches, is for use where a greater degree of custom-fitting is desired. Its size has been standardized to fit universal frames.



American Air Filter
COMPANY, INC.

355 Central Avenue, Louisville 8, Kentucky
American Air Filter of Canada, Ltd., Montreal, P. Q.

AAF Dust
Control Equipment



AMERglas Replaceable
Air Filters

BETTER AIR IS OUR BUSINESS

Herman Nelson
Propeller Fans



Herman Nelson
Unit Blowers

new literature

(Continued)

tion in forced air furnaces or packaged air conditioning units as well as a portable model with built-in circulating air system.

Powder Actuated Fasteners

POWDER ACTUATED TOOLS and fasteners are illustrated and described in catalog 2f-Ram — The Ramset Fastening System, Winchester-Western division of Olin Mathieson Chemical Corp., 12117 Berea Rd., Cleveland 11. The fasteners are shown in full size, are grouped with the tool with which they are intended to be used. The catalog is also divided into sections according to surface. Guards are illustrated both photographically and in outline drawing. A panel on the bottom of the front cover of the catalog is provided for dealer imprint.

Portable Furnaces for Temporary Heat

MODELS PW-189 AND VO-168 portable oil heaters are described in bulletin LL-2220 — Fageol Heat Machine division, R. D. Fageol Co., Box 328, Kent, O. Complete specifications and application data on both models are presented. Both are entirely self-contained, oil burning units that can be plugged into any

electrical connection. The PW-189 delivers 189,000 Btuh. The VO-168 has a heat output of 168,000 Btuh when unvented and 130,000 Btuh when heat is vented.

Gas Pressure Regulators

REVISED BULLETIN No. 1026 (20 pages) covers gas pressure regulators — Meter and Valve division, Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8. Included are descriptions of improved "173" regular regulators and new "173" high-pressure model; illustrated descriptions of four new regulator products — an improved "107" regulator with mercury seal, "107" with deadweight safety valve, "173" meter bar regulator and "118" farm tap regulator; and four rate-of-flow graphs illustrating mathematically the determination of maximum outlet pressure build-up and amount of gas relieved to atmosphere by "extra safety" devices in case of complete failure of a regulator.

Salesmen and Their Place in Business

THE SALESMAN STORY, 32 page booklet published by E. I. du Pont de Nemours and Co., Inc., Wilmington, Del. outlines how a good salesman plans his work to achieve above average results.



SEE YOUR JOBBER

CONDUCTOR ELBOWS AND SHOES

- **ALL SIZES**
- **ALL ANGLES**
- **ALL GAUGES**
- **ALL METALS**

"Tapered to Fit"

"Galvanized after Formed"

THE CINCINNATI ELBOW CO.

4730 Madison Rd.

Cincinnati 27, Ohio

Versatile!

AN EASY-TO-USE DIRECT-DRIVE BLOWER

The Center-Motor-Mount

REX TWIN-WHEEL

**EFFICIENT, QUIET OPERATION
FOR HEATING, COOLING, VENTILATING**

Air Controls, Inc. marks almost a quarter of a century of air moving experience with the proud presentation of the finest blower engineering accomplishment available today!

Here, at last, is a simplified, universal blower with more benefits and none of the drawbacks of conventional direct-drive units.

Only the unique, compact REX direct-drive, twin-wheel blower can bring you all of these desirable engineering and merchandising features:

CENTER MOUNTED, SELF SUPPORTED MOTOR

- Places less stress on wheel shafts and motor
- Guarantees balance and permanent wheel alignment
- Leaves both inlets free of obstructions
- Airflow cools motor for increased life-expectancy
- Solidly anchored motor eliminates strain, wear and vibration

SIMPLIFIED, FUNCTIONAL DESIGN

- Operating parts balanced before assembly
- Troublesome drive-belts eliminated
- No pulley wheels to lower efficiency; get out of alignment
- Improved outlet velocity distribution from twin wheels
- Engineered to satisfy a wide range of pressure-volume requirements

EASIEST TO INSTALL

- Compact shape . . . no protruding motor
- Mounts in any position
- Supports and hangers eliminated
- Furnished with rigid, cushioned blower outlet angles
- Serves as resilient mount for all-angle discharge

**WHATEVER YOUR BLOWER
NEEDS ARE, REX HAS THE
ECONOMICAL ANSWER
SEE THE COMPLETE LINE!**

WRITE FOR CATALOG 405B

TODAY!

AIR CONTROLS, INC.
Division of THE CLEVELAND HEATER CO.

2310 Superior Ave. • Cleveland 14, Ohio

NATIONAL LOCK

*makes the hardware
that makes the difference
in user appeal of your products*

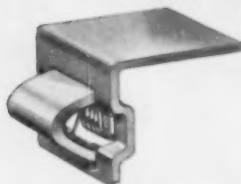
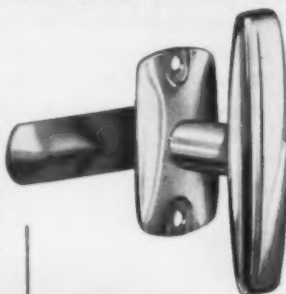


ATTRACTIVE, DURABLE HARDWARE FOR ACCESS PANELS ON FURNACE AND AIR CONDITIONING EQUIPMENT

61-366 LATCH

Assures attractive styling coupled with positive latching action.

Regularly supplied in bright Nickel and bright Chrome plated finishes.



61-3319 CATCH

Easily applied for a variety of applications on metal cabinets. Plain Steel and Cadmium plated finishes.



63-X3017 KNOB

Concave face. Hollow metal construction. Made of wrought Steel. Standard plated or enamel finishes.



Write for complete information
NATIONAL LOCK COMPANY
Rockford, Illinois

we hear that...

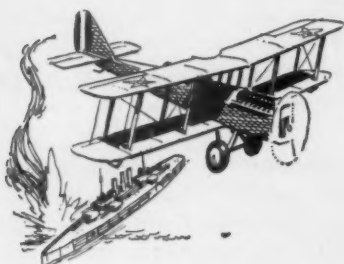
► THE DIRECTORS OF RHEEM MFG. CO. and Richmond Radiator Co. have approved a proposal to merge the two firms. The proposed transaction involves an exchange of four common shares of Richmond Radiator stock for one of Rheem. According to R. S. Rheem, president of the Rheem company, no changes in the Richmond company's organization or general operating policies are contemplated. "We intend to maintain Richmond as a separate operating division under the continued direction of John J. Hall as president," Mr. Rheem stated. "The other principal officers will also continue in their present capacities."

► BORG-WARNER CORP. has entered into an agreement for the acquisition of Primor Products, Inc., under the terms of which the Primor company will be operated as a division of Borg-Warner. Following the consummation of the transaction, Borg-Warner plans to expand the manufacturing space of the plant, which is located at 2011 W. Beecher Rd., Adrian, Mich. "We will continue the operation in much the same manner as at present, offering the same air conditioning products and engineering services," J. H. Ingersoll, a Borg-Warner divisional president, stated. He noted that Gorton F. Price, president of the Primor company, would remain with the firm in a consulting capacity.

► UNITED STATES AIR CONDITIONING CORP. has purchased Floral City Heater Co., Monroe, Mich. manufacturer of gas and oil fired heating units as well as combination heating and cooling units. The Floral City firm will be operated as a division of United States Air Conditioning Corp. and will retain all of its personnel. Distributorships will not be affected by the company's new affiliation, and Meyer Rosen, Floral City president, will continue to direct its activities as general manager of the new division. David E. Feinberg, president of United States Air Conditioning Corp., in explaining the reasons for the purchase, said: "The acquisition of manufacturing facilities for warm air furnaces has been dictated by the rapid expansion of the year 'round residential air conditioning field. Growth of this market in recent years is bringing about a merger of the home cooling and warm air heating industries into a single 'all-year home comfort industry,' in which greater sales accrue to manufacturers who provide a single source of supply of summer and winter air conditioning equipment."

At the company's recent annual sales meeting, R. P. Kelley, general sales manager, stated that the firm expects to produce 33 percent more packaged air conditioners and 66 percent more air cooled equipment in 1956 than in 1955.

Mr. Daniels was willing to be bombed



ADMIRALS smiled when, in 1921, he claimed air power could sink battleships. Josephus Daniels, the Navy secretary, said he was "prepared to stand bareheaded on the deck of a battleship and let General Mitchell take a crack at me with bombing airplane."

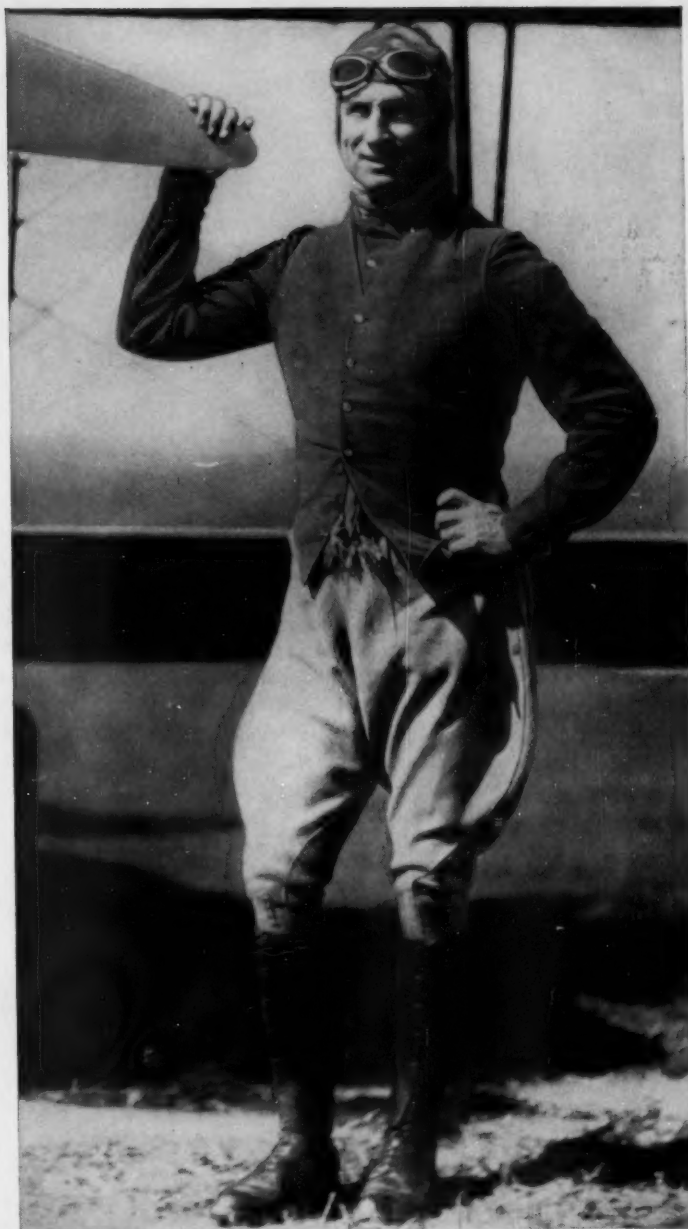
But in an actual test, the most heavily armored dreadnaught ever built sank in minutes under the sledge-hammer blows of the world's first 1-ton bombs—bombs built to Billy Mitchell's order.

Mitchell was used to disbelief. In World War I, Pershing called his idea for dropping infantry by parachute absurd. "Experts" laughed when he talked of putting cannon in planes, scoffed when he predicted air speeds way in excess of 200 miles.

In his early fight for a strong air force, Mitchell saw very dark days. Yet he never lost faith in the American people, nor they in him. For they recognized his clear foresight and great fighting heart as part of the real American spirit.

It is this courageous spirit that makes America strong—so strong, in fact, that our country's Savings Bonds are regarded as one of the finest, safest investments in all the world.

Why not take advantage of that strength? Use United States Savings Bonds to guard your future, and your country's future. Invest in them regularly—and hold onto them.



It's actually easy to save money—when you buy United States Series E Savings Bonds through the automatic Payroll Savings Plan where you work! You just sign an application at your pay office; after that your saving is done *for* you. And the Bonds you receive will pay you interest at the rate of 3% per year, compounded semiannually, for as long as 19 years and 8 months if you wish! Sign up today! Or, if you're self-employed, invest in Bonds regularly where you bank.

Safe as America—U.S. Savings Bonds

The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.





AN ANACHRONISM in the medieval castle exhibit sponsored by Western Engineering and Mfg. Co. is its 20th century ventilating equipment

► WESTERN ENGINEERING AND MFG. CO. is tying in the use of its products with the popular Disneyland project. Advantages of modern ventilating techniques over the 14th century method — fitful winds whipping through drafty rooms — are brought out in the exhibit sponsored by the company, which is a medieval

castle authentic in all details except one — its 20th century ventilating equipment.

► TO INCREASE ITS SHARE in the heating and cooling market, The Coleman Co., Inc. is planning three key programs: 1) a dealer development program through which the company expects to step up the selling power of present dealers and also attract new dealers; 2) in-season as well as special promotions with more emphasis on local advertising and point-of-purchase materials; 3) the manufacture of new products especially designed for the home modernization market.

The company plans to begin production of gas motor air conditioning units early this year, following a favorable report by gas utility engineers who represented 28 utilities that ran field tests on the unit during the 1955 cooling season.

► CLOUD WAMPLER, chairman and president of Carrier Corp., has been reelected a board member of the National Industrial Conference Board for the eighth successive year. NICB is a non-profit institution which provides facts and figures bearing on various aspects of economic life and business operation. It is supported by more than 3400 subscribing associates, including business organizations, trade associations, government bureaus, labor unions, libraries, colleges and universities.

**In the New York market
...where price is
an important factor ...
and rigid building
codes exist...**

**Empire Ventilators
outsell all others.**



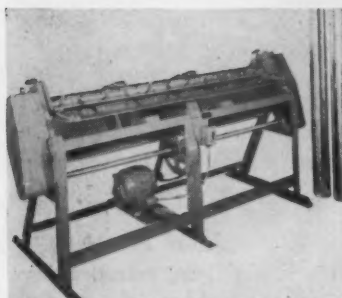
Sold thru
leading
wholesalers.
See your
jobber.

Empire Ventilation Equipt. Co.

35-39 Vernon Boulevard
Long Island City 6, N. Y.

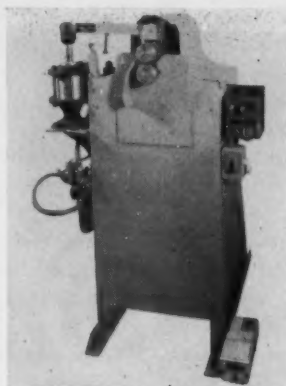
FALLSINGTON TRENDMAKERS . . .

used in hundreds of shops throughout the nation

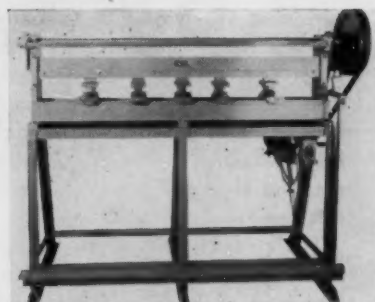


5' PIPE ROLLER . . . rolls pipe without damaging the locking device. This allows the lock to be formed on the sheets while it is flat. Capacity: 26 gage, 4" diameter (min.) in lengths up to 5'. All rollers are gear driven.

FALLSINGTON

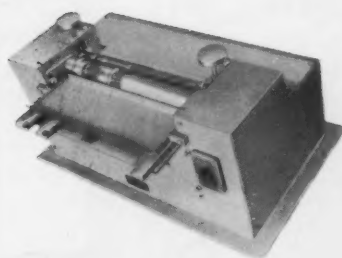


BEAD AND CRIMPER . . . recently developed by Fallsington engineers to eliminate waste of pipe during beading and crimping operation. Air actuated and equipped with electronic timer which can be set quickly for any diameter pipe. Easily operated and greatly reduces the fatigue factor. Companion machine for 5' Pipe Roller.

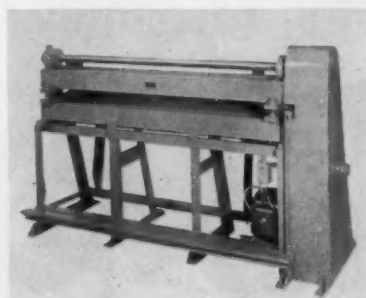


MULTI-NOTCHER . . . will make six notches at one time. Ideal for duct work. Dies are adjustable along the entire length of the machine. Power driven on hand operated models available in 36", 48", 60" sizes.

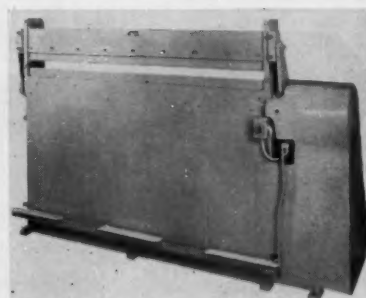
FALLSINGTON



COLLAR ROLLER . . . this machine will make five different types of collars. Adjustable table gages permit rapid set ups for any of the following operations: bead; bead and slit; bead and crimp; bead, crimp and slit; slit in the flat.



HUSKY PRESS . . . gives you large press bed area in the low price field. Designed to handle large sheets for blanking, forming, notching and piercing various types of fittings and duct work. Available in 36", 48", 60" sizes. Model shown is back geared.



PROGRESSIVE BRAKE . . . compactly designed for use in metals up to 22 gage. Use it for making boxes and snap lock duct. By using sectional dies, bends can be made in various lengths up to the full length of the machine. Available in 36", 48", 60" sizes.

WRITE DIRECTLY TO US OR CONTACT YOUR NEAREST DEALER.

REPRESENTATIVES

Meyer Sheet Metal Machinery Company,
Los Angeles, Calif.
Fellansbee Metals Corporation, Pittsburgh, Penna.
S. J. Johnson Company, Detroit, Mich.
Ward Machinery Company, Chicago, Ill.
H. Weiss & Company, New York, New York
Fable & Company, Inc., Philadelphia, Penna.
Varys Bros., Inc., Columbus, Ohio.
B. D. Brooks Company, Ltd., Boston, Mass.
O'Neill Machinery Company, Seattle, Wash.
J. B. Wallis Company, Jacksonville, Fla.
Brown-Beggs Machinery & Foundry Company, Ltd.,
Hamilton, Canada
Airco Products, Ltd., Vancouver, British Columbia
Hinkle Supply Company, Birmingham, Ala.

sheet metal machinery

by

FALLSINGTON MFG. COMPANY

Fallsington, Penna.

(Delaware Valley, U. S. A.)

Invitation

You are invited to visit our plant whenever in the area. We are located off Route #1, between New York City and Philadelphia. (Near the new Fairless Steel Works.)

(Continued)

► **JOSEPH T. RYERSON & SON, INC.**, steel warehousing subsidiary of Inland Steel Co., has entered into an agreement to purchase the property and inventory of the Wallingford, Conn. plant of the Follansbee Metals Corp. The buildings house a warehouse area of more than 47,000 sq ft. Charles L. Hardy, president of the Ryerson firm, stated that the plant and stocks will be "substantially enlarged to cover a more complete range of sizes and products and to provide facilities commensurate with the needs of this area."

The company also plans to expand its Charlotte, N. C. operation, and has agreed to purchase an 11½ acre tract of land at Pinoca as the site for a new and larger steel service plant. The new plant, construction of which is expected to begin in the near future, will be large enough to provide facilities for complete stocks of steel bars, plates, structural shapes, sheets and tubular steel products, according to Mr. Hardy.

► **THE BOARD OF DIRECTORS** of Niagara Machine & Tool Works has elected George E. Munschauer chairman of the board and chief executive officer. He has been with the firm since 1928, having served as treas-

urer and a director since 1941 and vice president and treasurer since 1945. Frederick E. Munschauer, Jr., is the firm's new president and general manager, succeeding his father. Franklin A. Reed was elected vice president in charge of sales. Edwin A. Munschauer, Jr., was named treasurer and also was elected a member of the board of directors.

► **H. F. VOGT** has resigned as chairman of the board of directors of Cutler-Hammer, Inc. He will continue as a member of the board. G. S. Crane, president and chief executive officer of the company since 1945, was elected to succeed Mr. Vogt as chairman of the board and was also elected chairman of the newly created plans committee. Philip Ryan, executive vice president and vice president in charge of manufacturing and development, was elected president and chief executive officer. J. C. Borden was elected vice president.

► **WILLIAM E. JUDD** has been appointed general manager of the U. S. Machine Div. of Stewart-Warner Corp. The appointment will fill the vacancy created by the retirement of Carl J. Winkler, Sr., who has been head of the U. S. Machine firm since it was founded and since its subsequent purchase by Stewart-Warner Corp. in 1953.



It's ultra modern! The new Air-Jet "Contemporary" with machine-pressed shadow lines!

A handsome complement to today's new homes! This modern design chimney is made of strong, light-weight aluminum . . . weighs less than a hundred pounds! Quality constructed for smooth, jet-age efficiency! Special drafts guard against rain, snow, downdrafts. Exclusive rain grooves eliminate leakage!

A sure hit with home-owners . . . a boon to builders! Send for free, illustrated booklet giving facts on the "Contemporary" and other Air-Jet chimneys!

AIR-JET OFFERS A FIVE-STAR SAVING!

- ★ Save time—Install in one man hour!
- ★ Save labor—Pre-assembled. Ready to put up!
- ★ Save money—Needs no special tools for installation!
- ★ Save worry—UL approved. FHA accepted!
- ★ Save space—Enough for a linen closet!

ASK ABOUT AIR-JET

THE LAST WORD IN PACKAGED CHIMNEYS

★ ★ ★ ★

A limited number of distributorships available.

**GENERAL
PRODUCTS CO., INC.**

Dept. AA

FREDERICKSBURG, VIRGINIA





We have a house to put in order...

WE HAVE A HOUSE to put in order . . . and it's the house where America lives.

Of our country's many million homes, more than 1 out of every 10 are out-and-out slums. Nearly one-half of all American dwellings are in poor to "fair" condition, and urgently need basic repairs.

Something *must* be done—both to correct the slums of today and *prevent* the slums of tomorrow.

How do slums start? Usually just one house starts to slide downhill and soon a whole block changes. Pride is lost. Other houses are neglected, decay spreads.

So the 20 million homes in need of basic repair and improvements deserve equal attention. The time to stop the spreading blight of slums is *before it starts*.

What's your stake in stopping slums?

If you think your town is different, just look around you . . . If you think slums only affect persons who live in them, think again.

Slums raise taxes and lower property values of the whole town. They raise rates of crime, delinquency and disease. *Everyone* has a real stake in stopping slums. *And that includes you as a businessman.*

Your firm is certainly dependent on the welfare of the community where you do business. But it's more than good business—it's good citizenship to take part in efforts aimed at civic improvements. It's the *responsibility* of every business.

What can your firm do? The answer to America's housing problems starts with individuals. But to roll back slums is such a big job it's going to take more than individual effort. It will need the cooperation of your business and many others.

Some slums should be torn down and a fresh start made. Others can be remodeled and made to conform to better living standards. So it is up to you to support every sound program which seeks adequate housing for all our people.

New help is now available

There is a new national, non-profit organization called A.C.T.I.O.N.—The American Council To Improve Our Neighborhoods—which is designed to help all individuals or groups interested in putting America's house in order.

Send for a free copy of "ACTION." It explains what A.C.T.I.O.N. is and proposes to do. It lists booklets, research, check-lists, and other material which can help you. Address P. O. Box 500, Radio City Station, New York 20, N. Y.



American Council To Improve Our Neighborhoods



MEMBERS OF the award executive committee of Allmetal Screw Products Co. examine one of the awards to be given in the annual contest for articles on stainless steel. From left are Stanley R. Marsh, Marvin Tabak, Jack Epstein and Nat Epstein

▶ ALLMETAL SCREW PRODUCTS CO., INC. is sponsoring an annual contest designed to stimulate the writing of articles that will bring more information about stainless steel to industry. The first prize of \$1000 will be given to the author of the article judged of most value and interest to those who specify or buy stainless steel parts or components. Other awards include three honorable mention scroll citations, which

will go to authors of articles other than the winning entry, and a "Stainless Steel Award Plaque" which will be awarded to the editor of the industrial trade magazine carrying the winning article. Winners will be announced February 15.

Judging will be done by a panel of four representatives of the steel industry: Ray G. Sloan, manager, Development Engineering Dept., Armco Steel Corp.; F. Price Norris, Jr., director of stainless steel sales, Allegheny Ludlum Steel Corp.; Richard E. Paret, secretary, Committee of Stainless Steel Producers, American Iron and Steel Institute; and James D. Glenn, general manager of sales, Crucible Steel Co. of America.

The company hopes the contest, which will be conducted annually, will help focus the attention of purchasing agents and engineers on significant findings in stainless steel developments.

▶ INTERNATIONAL SALES CO. has completed an addition to its San Francisco manufacturing plant facilities. The new building, comprising 12,672 sq ft of floor space, provides enlarged machine shop and testing laboratory facilities.

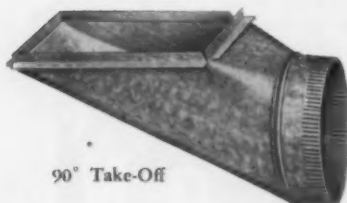
▶ KLING BROS. ENGINEERING WORKS has expanded its distributor organization to include representatives in more than 30 principal cities in the United States and Canada.

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S
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30" and 60" Length
Galvanized or Aluminum



90° Take-Off



Air Conditioning and Heating

Pre-Fabricated

DUCT and FITTINGS

Maxwell Steel Company, a leader in the sheet metal industry of the Southwest for twenty-five years, extends its leadership in quality and service to the manufacturing of pre-fabricated duct.

Masco pipe and fittings represent a complete line in every respect and are designed especially for use in forced air heating and air conditioning.

Masco fittings have been standardized and are capable of fulfilling the requirements of the most complicated layout. This standardization provides faster and more efficient service and delivery.

Write for Catalog

MAXWELL STEEL COMPANY
P. O. Drawer 230
Fort Worth 1, Texas

Guaranteed Savings on Steel

...guaranteed satisfaction, too!

ROLLED STEEL PRODUCTS can save you over 20% on all your steel needs. Any size, any type, any gauge. No order too small or too big. Immediate delivery.

WE UNCONDITIONALLY GUARANTEE YOUR SATISFACTION ON EVERY PIECE OF STEEL LEAVING OUR WAREHOUSE.

Find out how you can save as 4,020 other firms throughout the country are doing. Call and reverse the charges to us today!

Another steel-buy typical of
ROLLED STEEL'S VALUES:

NOW . . .

Over 3,000 tons of Galvanized in stock. Phone us first for all your needs.

Rolled Steel Products

Division of Emergency Steel Service Corporation

Distributors of: SHEETS—PLATES—BARS—STRUCTURALS—STRIP

GENERAL OFFICES & WAREHOUSE

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ORchard 3-7400

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GOOD
BRUSHES
AND
SCRAPERS

**Wise Contractors
Are Cleaning Up —
With The Right Brushes!**

Having an adequate supply of the proper brushes can save your workers' time — can save you money.

Cleaning tubes and flues of Boilers, Furnaces, and Chimneys can be done better and faster with Worcester brushes and scrapers, yet they cost no more. Stock up now. See your favorite wholesaler today.

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Free Catalog**



**Specialists in the
Manufacture of Brushes
For Every Type of Industry**

WORCESTER BRUSH AND SCRAPER CO.

Division of

MASON-WORCESTER BRUSH CO.

38 AUSTIN ST. WORCESTER 1, MASS.

NEW 4-Way DIFFUSER

ONE Register for EVERY Air Pattern



New Design Provides
THE BEST
in Perimeter Heating
& Cooling

Shapes, aims and diffuses air
IN ANY VOLUME, IN ANY DIRECTION

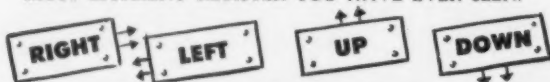
FINGER-TIP CONTROL

- Easy, low-cost installation
- The most efficient air diffuser for your heating and cooling requirements
- No damper required—Positive shut-off
- Much more efficient, yet costs no more than conventional registers
- Adjustable in ALL directions—Simplifies your "balancing" problems
- Modern, eye-appealing design

PERFECT AIR PATTERNS—
POSITIVE VOLUME CONTROL

Gentle-Flo Diffusers send air in any direction with positive, finger-tip control.

This revolutionary control makes the Gentle-Flo Diffuser THE MOST EFFICIENT REGISTER YOU HAVE EVER SEEN.



For More Information Contact

GENTLE-FLO COMPANY

Dept. A, 401 Boro Avenue
Clifton Heights P.O. • Delaware County, Pa.

we hear that

(Continued)

► **WILLIAM GILLET**, Detroit Steel Products Co., has been elected to a second term as president of the Producers' Council, Inc., a national organization of building materials and equipment manufacturers and associations.

► **THE CLAYTON & LAMBERT MFG. Co.** has built an addition to its present plant to provide more manufacturing facilities for the production of "Alumilux" water heaters.

► **INCREASED DEMANDS** for gas appliance controls has resulted in a major expansion of Minneapolis-Honeywell Regulator Co.'s factory in Gardena, Calif. considerably ahead of schedule. E. M. Toussaint, general manager of the Appliance Controls Div., stated that a new addition had been completed that will double operations. He said original plans called for new units to be added over a five year period, but due to the growth of the division's business, additional facilities were needed earlier than expected.

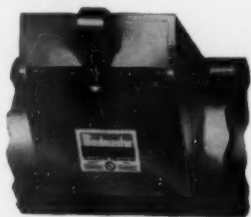
The company has recently completed a one-story office building in Boston at the corner of Soldiers Field Rd. and Everett St. which will serve as headquarters for the firm's heating sales and service in Massachusetts, Maine, Rhode Island, New Hampshire and the northern half of Vermont.

► **THE AIRTEMP DIV.**, Chrysler Corp. recently was host to a group of visitors from Latin America who came to the United States under the auspices of the International Cooperation Administration. The group had studied trade union subjects at the University of Puerto Rico. Their visit to the Airtemp plant was part of a program of study and observation designed to acquaint them with labor-management relations, workers' education programs, grievance procedures and other union-management activities as practiced in the United States.

► **THE BOARD OF DIRECTORS** of Crucible Steel Co. of America has elected James D. Glenn vice president of sales and Maurice J. Day vice president of research and development. Mr. Glenn was formerly general manager of sales for the company. Dr. Day was previously director of research and development.

► **HOWARD K. BECK** has been named president of the Jackson and Church Furnace Div., a subsidiary of the Norbute Corp. F. C. Adams has been appointed vice president of the division. Mr. Beck was acting manager of Jackson and Church Co.'s furnace department until 1954, when the present division was created and at which time he was named division manager. Mr. Adams was previously sales manager for Jackson and Church Co.

The Modern Draft Control
that's "QUICKER ON THE DRAW"
and
"FASTER In The SADDLE"



It's a cinch to get the Windmaster Draft Control "in the saddle" and on the job faster . . . silently riding herd over your installation so the burner operates smoothly and efficiently even under the most variable draft conditions.

Just cut a full sized hole in the pipe . . . assemble all parts before putting the control on the pipe . . . tighten the two draw bands . . . then adjust the calibrated weight. No pipe flanges to hammer . . . the flange is already on the control.

Once installed, Windmaster is "quicker on the draw". It's easy to see why. The 45° angle vane is poised for faster action which assures prompt relief at the slightest increase in draft without nervous j-i-t-t-e-r-s.

- 45° Vane—no nervousness—faster response.
- Large Square Vane—more effective area.
- Permanently Silent Non-Rusting Nylon Bearings.
- Sloping Pipe Installations.
- Calibrated Counter-weight.
- E-Z 'Dapter—quick, easy installation.
- Permanent, Positive Vane Stops

Cash In On These Windmaster
Features On Your Next Job



Windmaster Corporation

43 Vine St.

Columbus 15, Ohio

AMERICAN ARTISAN, JANUARY 1956

Which
TYPE*
Do YOU Prefer?



FLEXI-DUCT VIBRA-STOP

***Grant Wilson**
FLEXIBLE DUCT CONNECTIONS

Stop system noise on Heating, Ventilating and Air Conditioning installations. Isolate mechanical rattles, starting vibrations, "on and off" cycle sounds, shaft whine, fan hum, etc. at their source. Apply either of the Grant Wilson Flexible Duct Connections between blower or plenum and furnace casing, between take-offs and main or branches . . . the resultant quietness of system operation satisfies customers, leads to more jobs, without call-backs.

FLEXI-DUCT . . .

Grant Wilson's Woven Asbestos Flexible Tape. *The choice of those who want rock-bottom economy combined with top efficiency.* Handy 50 foot rolls, 6 inches wide, and 150 foot rolls, 8 in. wide, both with selvaged edges. Can be taped or bolted to equipment or duct work.



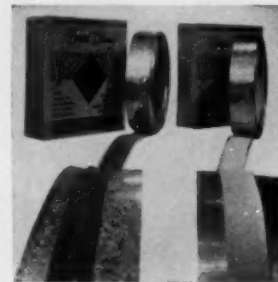
FLEXI-DUCT lifts out of carton for easy use.

VIBRA-STOP . . .

Asbestos or Canvas, 4" wide, factory seal to 4" No. 1 Prime Galvanized Metal on one side, 3" on the other. *Preferred by those who want the quickest, easiest installation.* 25, 50 and 100 foot rolls in handy "roll out" cartons.

Asbestos used is Underwriters' grade and meets Federal specs. MIL-C-4177. Canvas, also Underwriters' grade, meets Federal specs. MIL-D-10860.

Write today for full information, FREE samples and prices — ask for Bulletin 156-AA.



VIBRA-STOP comes in handy "roll out" cartons.

Grant Wilson inc.

ASBESTOS and INSULATING MATERIALS

141 WEST JACKSON BLVD. • CHICAGO 4, ILLINOIS

► **KAISER ALUMINUM & CHEMICAL CORP.** has started a \$280,000,000 expansion program that will bring the company's total primary aluminum capacity up to 654,000 tons per year. Major projects under the program will be construction of new plants at Ravenswood, W. Va. and Gramercy, La.

► **Morrison Products Inc.** has just completed an expansion and modernization program which included adding one-third more square footage to the plant's capacity. This enlargement, plus the purchase of capital equipment, represents an investment of approximately \$300,000.

► **REVCOR** plans to enlarge its plant in Carpentersville, Ill. to double its present size to provide the facilities needed to meet expanded production schedules.

► **STOCKHOLDERS** of the Excelsior Steel Furnace Co. recently elected A. B. Glessner chairman of the board. H. W. Mitchell and H. C. Glessner were elected directors. At the directors' meeting, the following officers were elected for the ensuing year: president, H. W. Mitchell; vice president and sales manager, J. S. Mc-

Donald; treasurer, H. C. Glessner; secretary and assistant treasurer, C. R. Carlson; assistant secretary, R. B. Clement; assistant vice president in charge of the Kansas City Div., J. B. Fehlig, Jr.; assistant vice president in charge of the St. Paul Div., Roger Wilson.

► **THE WALES-STRIPPIT CORP.** has introduced a "pay as you produce" plan, under which major items of sheet metal working machinery may be purchased on long term installment plans featuring graduated payments. In describing the plan, Homer C. Gray, Jr., vice president and director of sales, explained that its use "permits a modest initial investment, with payments distributed over the period during which the machine is earning its cost and increasing profits."

► **FRED S. GOMBERT** has been elected a divisional vice president of Borg-Warner Corp. Mr. Gombert is manager of the firm's Conditioned Air Div. in Kalamazoo, Mich.

► To meet rapidly increasing demands for its small punch presses, Kenco Mfg. Co. is doubling its Los Angeles plant area. Expansion plans include increased production facilities and the development of automatic and semi-automatic mass production processes.



Super Model SH

Only The Super Can Do The Job So Well

No other furnace cleaner has as many design and construction features for doing a thorough cleaning job as the Super Model SH. No other furnace cleaner is as capable of creating the kind of customer satisfaction that means repeat business and new prospects for plants and services.

- Cleans all kinds of heating plants
- Light weight
- Wet and dry suction
- Cleans 'em hot or cold
- Available with stainless steel or enamelled steel container

Ask your local Super dealer.

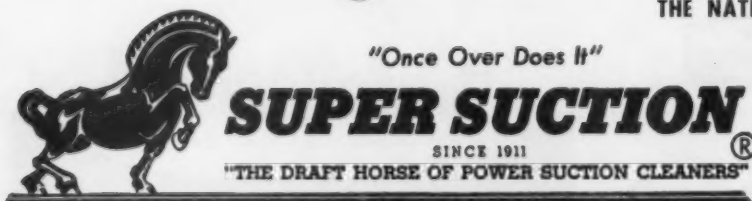
Write for complete specification data.

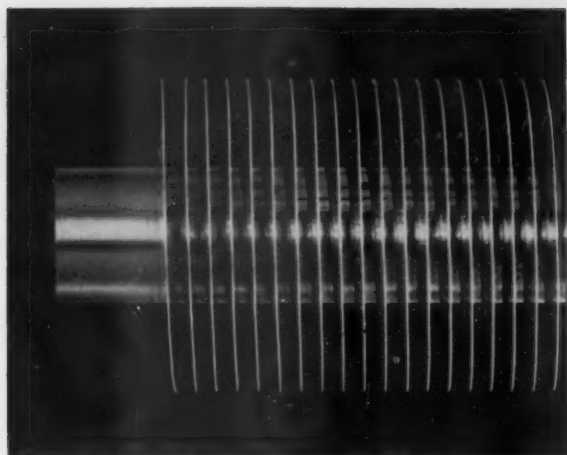
THE NATIONAL SUPER SERVICE COMPANY

1944 N. 13th St., Toledo 2, Ohio

Sales and Service in Principal Cities

In Canada: Plant Maintenance Equipment Co.
Toronto, Montreal, Vancouver





AEROFIN

Smooth-Fin Coils offer you

Greater Heat Transfer
per sq. ft. of face area

Lower Airway Resistance
—less power per c.f.m.

Aerofin smooth fins can be spaced as closely as 14 per inch with low air friction. Consequently, the heat-exchange capacity per square foot of face area is extremely high, and the use of high air velocities entirely practical. Tapered fin construction provides ample tube-contact surface so that the entire fin becomes effective transfer surface. Standardized encased units arranged for simple, quick, economical installation.



Write for Bulletin S-55

AEROFIN

CORPORATION

101 Greenway Ave., Syracuse 3, N.Y.

Aerofin is sold only by manufacturers of fan system apparatus. List on request.

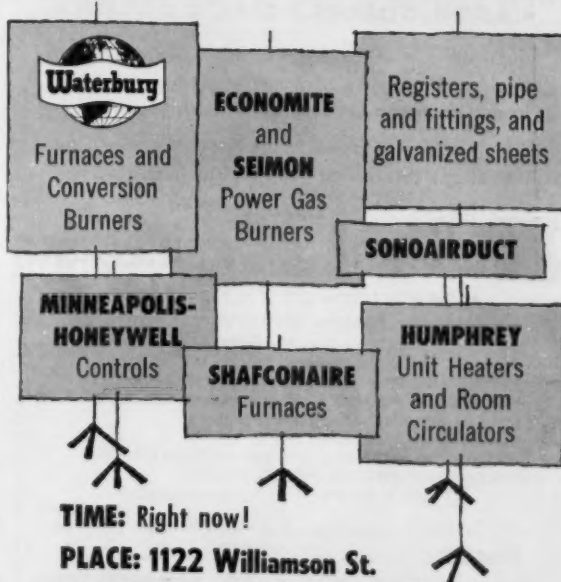
HEY, BIG NEWS
IN HEATING FOR
**SOUTHERN
WISCONSIN!**



Waterbury

Heating Supply Co.

OPENS WHOLESALE HOUSE IN MADISON!



TIME: Right now!

PLACE: 1122 Williamson St.

PHONE: Alpine 5-4509 or 5-4500

SUGGESTION: Call us today!

for business

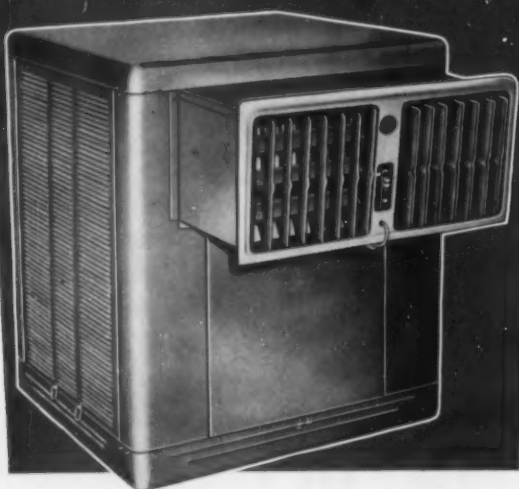
for industry

for homes

the most refreshing
cooling systems
in the world are

ChillAir

EVAPORATIVE COOLERS



MODELS 30WP, 32WP, 40WP, 42WT
LARGE COMMERCIAL COOLERS

duplicating in office, plant or home the wonderful,
healthful freshness of early morning... at the
lowest operating cost, the easiest installation!

If you're a contractor or distributor, you'll be
interested! Let us send you full information...

National Engineering

& MANUFACTURING, INC.
Sales Division
SEDALIA, MISSOURI

NATIONAL ENGINEERING & MANUFACTURING COMPANY
SEDALIA, MISSOURI

Gentlemen:

I am interested in further information on CHILL-AIR FANS.
DEALER AND DISTRIBUTOR INQUIRY INVITED.

☐ I AM A DEALER ☐ I AM A DISTRIBUTOR

NAME _____

STORE NAME _____

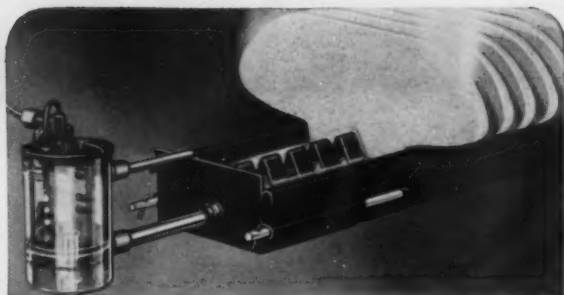
ADDRESS _____

CITY _____

ZONE _____

STATE _____

AA 1-58



The American Society of Heating
and Ventilating Engineers defines air
conditioning as: "The simultaneous
control of all, or at least the first
three, of those factors affecting both
the physical and chemical conditions
of the atmosphere within any struc-
ture. The factors include temperature,
humidity, motion, distribution, dust,
bacteria, odors and toxic gases, most
of which affect in greater or lesser
degree human health or comfort".

HUMIDITY IS OUR BUSINESS...

and it could mean bigger business
for you.

The effective control of humidity
absolutely essential to efficient
operation of a modern automatic
forced air unit, is positively assured
by the installation of a Monmouth
Humidifier. Simple to install, takes
only a few minutes, means greater
satisfaction to your customer, in-
creased profits for you.

Made in various capacities up to
420,000 BTU, there's a proper
size for every heating unit.

Write for descriptive literature, prices and discounts.

CLEVELAND HUMIDIFIER CO.

7802 Wade Park Avenue

Cleveland 3, Ohio

MONMOUTH HUMIDIFIERS

we hear that

(Continued)

► THE WESTERN HEATER & TANK division of the John Wood Co. recently completed construction of a new heater assembly building. The new facilities, according to George W. Meehan, vice president, makes it possible for the plant to produce approximately 12,000 units per month.

► CONNOR ENGINEERING CORP. has opened a district office in Los Angeles. Loyd J. Helms, formerly with English and Lauer, Inc., will be manager.

► A NEW DISTRICT OFFICE has been opened in Birmingham, Ala., by Century Electric Co. The new office is located at 831 N. 19th St.

► THE GENERAL ELECTRIC Co. recently received an award for its direct mail program for packaged air conditioners. Presented by the Direct Mail Advertising Association, the award covered the air conditioning department's direct mail programs for 1955.

► R. L. HENDRICKSON has been named manager of the refrigeration and air conditioning training department of Utilities Engineering Institute. In his new position he will devote considerable time towards keeping the training course current in addition to

instructing and supervising instruction courses. He will also be contacting equipment manufacturers for product data to include in the training program.

► THE DAYTON RUBBER CO. has developed a machine to measure V-belt vibrations. According to the company the machine will enable engineers to produce more efficient and quieter V-belts which, in turn, will result in quieter air conditioners and furnace blowers.

► THE NU-WAY CORP. recently completed a new plant that provides a 40 percent increase in floor space. Located in Milan, Ill., the new building was erected and equipped at a cost of more than \$100,000. It will add 16,000 sq ft, of which half will house manufacturing operations with the balance being devoted to warehouse space.

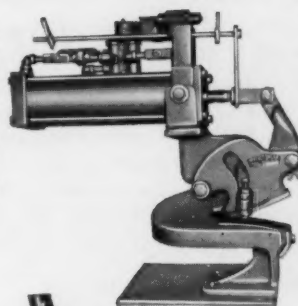
► INLAND STEEL Co. plans a three-year expansion program for its basic steel plant at East Chicago, Ind. that will lift its steelmaking capacity 15 percent to 6,000,000 tons of ingots annually by 1959. A major item will be a second cold rolled sheet department which will ultimately double the present output of this product. Immediate plans call for an increase of approximately 50 percent by 1959. In addition, the program includes a substantial increase in the capacities of the hot strip mills and a continuous normalizing line for enameling sheets.

Beverly Shears MEAN BETTER WORK



THROATLESS SHEAR

Make straight or intricate cuts in the lightest metals without distortion, yet handle heavier gauges with ease on a BEVERLY — the all-around Throatless Shear. Made in 4 models to handle 18 gauge to 3/16". Equipped with High Carbon, High Chrome Blades.



BEVERLY PNEUMATIC SHEAR

All the advantages of Beverly Throatless Shear with fast power operation. Operates on shop air pressure. Stroke adjustable for length and speed. Capacity to 3/16" mild; 10 ga. stainless.



INSIDE SLOTTER

8" reach, Inside Slotter, design to make inside cutting and slotting faster and easier. Capacity up to and including 16 ga. mild. Cuts slot 2 1/2" long x 1/8" wide with one stroke. Unique arrangement of 5 H.C.H.C. blades assures fast, clean, accurate cutting.



SLITTING SHEAR

All steel welded construction, plus extra built-in strength keeps the "SS-3" Slitting Shear cutting clean indefinitely. No springing of blades, no distortion after use. Slitting capacity 3/16" mild steel; trimming capacity 5/16"; bar capacity 1/4" x 2". Equipped with High Carbon, High Chrome Blades. Made in 3 sizes.

See your Dealer or Write direct for illustrated catalog sheets on Beverly equipment.

THE BEVERLY SHEAR MFG. CO.
3020 W. 111th Street Chicago 43, Illinois

Better COOLERS for the BIGGEST MARKET



ALTON

airwasher type **EVAPORATIVE
COOLER**

Investigate the huge untapped source of air conditioning sales. The NEW market of plants, factories, and laundries, where high cost refrigeration is not warranted, is ready for low cost ALTON EVAPORATIVE COOLERS. The Alton is engineered for maximum circulation of cool fresh air . . . is built to last . . . operates very economically . . . is effective in all climates. Seize your ALTON sales' opportunities today.

*Latex-Coated Filters (Alton Exclusive) deliver cleaner, cool air faster, more steadily.

*AquaSpray Unit wets all the filtermat surface effectively.

*Squirrel Cage Blower distributes maximum quantities of fresh air uniformly.

WRITE US FOR THE FACTS
DEALER TERRITORIES AVAILABLE

ALTON MANUFACTURING COMPANY

1112 Ross Avenue, Dallas, Texas

NAME
BUSINESS NAME
ADDRESS
CITY STATE

wholesaler doings...

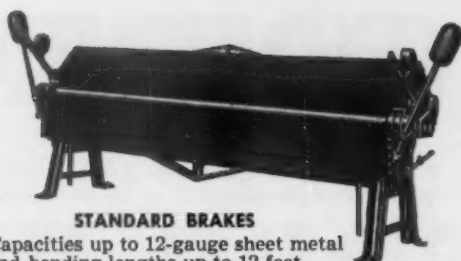
► THE AMERICAN INSTITUTE of Wholesale Plumbing & Heating Supply Associations, Inc. recently surveyed its membership in an effort to learn how business costs for the year 1954 compared with costs for 1953 and 1952. Following is the institute's consolidated report on the cost of doing business and other data furnished by member associations:

	Average 1954	Average 1953	Average 1952
Net Sales	100.00%	100.00%	100.00%
Cost of Goods Sold	80.40	80.00	79.63
Gross Profit	19.53	20.00	20.33
Selling Expense	4.04	4.58	4.07
Delivery Expense	1.41	1.47	1.50
Warehouse Expense	2.32	2.10	2.36
Office Expense	2.77	2.88	3.00
Administrative and General Expense	5.97	6.13	6.24
Total Expense as above	16.51	17.16	17.17
Operating Profit	3.09	3.74	4.36
Other Income	1.45	1.32	1.18
Other Deductions	1.50	1.62	1.36
Net Profit before Taxes	3.04	3.54	4.21
Federal Taxes on Incomes	1.24	1.58	2.02
Net Profit for Year	1.80	1.98	2.38
Number of Turnovers	4.60	4.47	4.43
% Direct Shipment Sales to Total Sales	16.90	19.10	19.46
1954 Sales vs 1953 Sales	+ .22		

► ARNOLD-BROWN METALS & Supply Co., Birmingham distributor, in cooperation with the Bryant Div. of Carrier Corp., recently concluded a "Bryant-Bermuda" sales contest for Alabama dealers. Major prize — an all expense trip to Bermuda — was won by 22 dealers. Barto Brown of the Arnold-Brown company says results of the contest were so outstanding that it will be repeated in 1956.

► MYERS FURNACE SUPPLY CO., INC., 1407 Swissvale Ave., Wilkesburg, Pa. has been appointed a distributor of heating and air conditioning equipment for Peerless Furnace & Foundry, Inc. Territory to be served includes 50 counties in the Pittsburgh trading area.

► BRODY EQUIPMENT CO., a distributor of General Electric heating and cooling products in the West Newton, Mass. area, recently reduced customer complaints from 60 to 1, according to Dick Schiavo, service manager for the Brody company. Mr. Schiavo advertised in local newspapers for mechanics to service GE equipment, and enrolled the 15 men selected



STANDARD BRAKES

Capacities up to 12-gauge sheet metal and bending lengths up to 12 feet.



FOLDER BRAKES

The simplicity and ease of operation make this a desirable machine for light sheet metal work. Seams and locks can be made efficiently. Capacity up to 20-gauge in three sizes of bending lengths of 36, 42, and 48 inches. Foot treadle clamp.



PORTABLE BRAKES

Set up shop right on the job. Capacity 20-gauge sheet metal in two sizes with bending lengths of 49 and 61 inches.

6095

Hand Operated BENDING BRAKES

One Man Operation - Quick Adjustment - Rugged Construction



Descriptive Literature on Request.

DREIS & KRUMP
MANUFACTURING COMPANY
7404 S. Loomis Boulevard, Chicago 36, Illinois

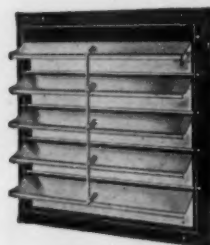
Elgo Ventilating Specialties

FAMOUS AUTOMATIC SHUTTER

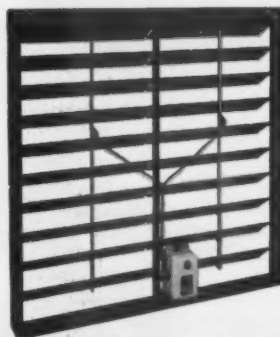
Unusually sensitive to air currents, causing the louvers to open instantly when the fan is turned on—and snap shut when the fan is turned off. The aluminum louvers are weather-stripped. The best fitting shutter on the market.

Louver blades have special felt silencing pads. Equipped with improved shoulder rivet.

Sizes from 12" to 72" square — also rectangular.



"ELGO" TYPE
AUTOMATIC SHUTTER
Front View (Open)
DETROIT 8, MICH.



All-Steel Motorized Shutter

Used for exhaust ventilation in industrial, commercial and residential buildings. Automatically controlled by fan switch. Positive closing. Storm-proof. All-steel construction.

Elgo Shutter & Manufacturing Co.
2738 W. WARREN

Elgo Shutter & Mfg. Co.
2738 W. Warren
Detroit 8, Michigan

Free
CATALOG

Please send catalog showing the items checked below:

Automatic Shutters Ceiling Dampers
Stationary Shutters Motorized Ceiling Shutters
Hand Operated Shutters Motorized Shutters

Name

Address

City State

wholesaler doings

(Continued)

for the GE Home Heating and Cooling Department's training program. On completion of the training period, the service men were all hired by the members of the Brody company's organization. In addition to cutting down home owner complaints, Mr. Schiavo reports, his company also increased its dealership from 15 to 45.

▶ **SID HARVEY**, chairman of the board of the Associated Sid Harvey Companies, reports that the executive committee has voted for a \$50,000 expansion program for the next two years. The organization now consists of the main plant in Valley Stream, N. Y. and 38 stores in the East. The expansion program calls for additional stores to serve key areas not now being served.

▶ **THE ANSLINGER AIR CONDITIONING CO.**, 1215 N. Broadway, Corpus Christi, Tex. now handles the distribution of air conditioning products for Servel, Inc. in the Corpus Christi trading area.

▶ **WATERBURY HEATING SUPPLY CO.** has opened a new wholesale office in Madison, Wis. to serve southern Wisconsin heating dealers. Stocking a complete line

of warm air heating and cooling equipment, fittings, registers and repair parts, the warehouse will offer one day delivery service. Arthur R. Rees has been named to head the new operation.

▶ **THE A. G. BRAUER SUPPLY CO.**, St. Louis has acquired all repair parts and all furnace records of the St. Louis Furnace Mfg. Co., formerly Home Comfort Furnace Co.

▶ **REBUILT COMPRESSORS** for air conditioning applications where replacements are needed is being offered to dealers of the far west by Carsco, Inc., 5086 Alhambra Ave., Los Angeles 32. The company specializes in Airtemp equipment. Service and installation jobs will be performed in the name of any dealer wishing to subcontract his service calls or installation work.

▶ **ALLIED DISTRIBUTING CO.**, Cincinnati, a distributor for the General Electric Co.'s home heating and cooling department, recently sponsored its first application and service training school. Seventeen students attended the application portion of the school and 32 the service portion. Ray Simmons and Richard Emerich of the home heating and cooling department assisted in the presentation of the course.

**FOR THE
FINEST**



**Benj. P. Obdyke, Inc.
447 N. 8th St.
Philadelphia, Pa.**

*Available Only
Through Selected
Distributors*



Safety Edge Gutter



Snaptite Gutter



Standard Drip Edge



Style "A" Rake Edge



Style "D" Eaves Drip



Conductor Pipe



Gravel Stop

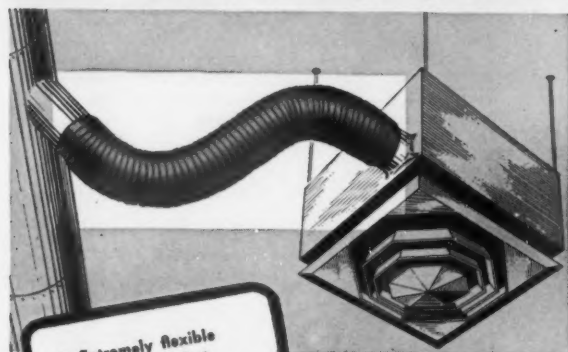
WIREMOLD

flexible

AIR DUCT

tested-proved-preferred

**for Commercial
Air Conditioning systems**



- Extremely flexible
- Light weight but sturdily constructed
- Takes all bends without kinking
- Excellent air flow characteristics
- Waterproof . . . flame resistant

*Easy to install
... Saves time,
money, effort!*

WIREMOLD Flexible Air Duct was developed to meet all requirements for flexible connections in air conditioning systems as specified by leading manufacturers of air distribution equipment.

WIREMOLD Flexible Air Duct's exclusive construction and a specially coated Fibreglas fabric assure maximum longevity. Fabric component is mechanically locked into the strong, steel spiral — no glue or other adhesive to dry out or crack.

WIREMOLD AIR DUCT for air conditioning applications was developed through two years of laboratory testing; service-proved in many prominent buildings. Recommended by leading makers of air distribution equipment.

For further information
write for Data Sheet S-3.



The WIREMOLD Company
HARTFORD 10, CONNECTICUT

GET FULL PROFITS

WITH
"THE GOOD
BUSINESS LINE"



**MANUFACTURERS OF QUALITY HEATING
AND AIR CONDITIONING EQUIPMENT**

There is no finer furnace built than Thermo. Dealers have found this to be true, and are happy with our profit making "Good Business Line". Profits from the very first unit give you the advantage of working capital all year long.

A complete line for any type of installation, with top engineering and know how, gives you equipment that you can install with confidence and with the least amount of service problems of any other on the market. Fill in the coupon below and find out more about "The Good Business Line".

Thermo-Products Inc.

NORTH JUDSON, INDIANA

Gentlemen: Rush me details, without obligation, on THERMO-PRODUCTS, "Good Business Line."

NAME _____ TITLE _____
FIRM _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____



BE SURE you use...

**GALVAN
ELBOWS**



THEY
S-L-I-D-E
TOGETHER

* It's the precision
production that counts

GALVAN
MANUFACTURING COMPANY
NEW ALBANY, INDIANA

merchandising ideas



TRION, INC. featured "Miss Clean Air" in its publicity during Cleaner Air Week

► DURING CLEANER AIR WEEK, sponsored by the Air Pollution Control Association, Trion, Inc. publicized its electronic air cleaner as "a weapon in the war on air pollution." Cleaner Air Week is a nationally observed event designed to acquaint the public with the danger of air pollution and to encourage general participation in plans to reduce such pollution.

► REVERE COPPER AND BRASS INC. has prepared a booklet directed to home owners as well as heating dealers, sheet metal workers, architects and builders. Entitled *Building to Endure with Revere*, it emphasizes the need for proper home planning including the selection of long lasting materials that require little maintenance. Flashing of all types, gutters and downspouts, hot water storage tanks and heaters are among the subjects covered.

► TO DEMONSTRATE A NEW THERMOSTAT that will automatically switch a two-way system from heating to cooling as needed, General Controls Co. has constructed a miniature heating-cooling plant for its exhibit at the National Association of Home Builders' show to be held in Chicago beginning January 22. The dual thermostat is recommended for installations where completely automatic summer-winter temperature control is desired.

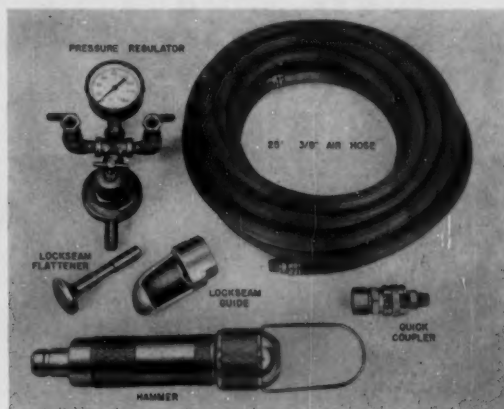
► THE HEATING AND COOLING DIV. of Union Asbestos & Rubber Co. used outdoor advertising to attract visitors to its booth at the recent Air-Conditioning and Refrigeration Industry Exposition. Located on the roof of a three story building on the Boardwalk, the



Consult your local dealer or
write for complete information

BURGESS THOMAS COMPANY
BOX 287
BLOOMFIELD, NEW JERSEY

The CALDWELL HAMMER for
sealing Pittsburgh lockseams
with speed and smoothness



The CALDWELL HAMMER KIT
Saves Time — Saves Labor

**SIT TIGHT
FOR THE**

BIG

**GREAT, NEW
SALES
OPPORTUNITY
FOR YOU!**

Due in February!

FOR FLEXIBLE CONNECTIONS IN

- DUST COLLECTION ● FUME CONTROL
- AIR-CONDITIONING ● MATERIALS HANDLING

PORTOVENT® ◀◀ USE ▶▶ FLEXAUST®

Spiral wire reinforced

DUCT



Sizes 3" to 36" ID Wide
Pitch type RETRACTABLE

Flexaust hoses and Portovent ducts are made with strong cotton or nylon fabrics, impregnated and coated with neoprene compounds. Seams are fully bonded. Other important features are—

- ✓ EXTREME FLEXIBILITY
- ✓ AIRTIGHT — STRONG
- ✓ LIGHTWEIGHT — DURABLE
- ✓ VERY EASY TO HANDLE AND INSTALL

STOCKS IN PRINCIPAL CITIES

Spiral wire reinforced

HOSE



Sizes 1 1/4" to 36" ID
Close pitch type

WRITE TODAY FOR

Bulletin #40 — General Information
Bulletin #41 — Accessories and Installation Data
Bulletin #42 — Technical data on products and service.
Bulletin #43 — Application data and type selector guide.
Bulletin #44 — Friction loss data.
Prices lists.

THE FLEXAUST COMPANY, Dept. AA-1

100 PARK AVENUE

NEW YORK 17, NEW YORK

Big Sales Possibilities and **EXTRA PROFIT** in **REPLACEMENT BUSINESS**



Mr. Dealer

Here is an answer
to your Pulley and
Belt Problems

Zatko

ONE PIECE

Stamped

Steel Pulleys

for greater strength
— longer wear —
lower cost

See Your Wholesaler
for Zatko Pulleys and
Quality Belts and a lot
of extra profit

Replacement Parts Inc.

22408 Lake Shore Blvd.
EUCLID 23 OHIO

merchandising ideas

(Continued)

illuminated sign was in full view of convention visitors. According to Edwin E. Hokin, president, "the cost of the four day display was offset by the splendid direct-selling job it did."

► THE MARKETING PLAN developed by Westinghouse Electric Corp. for its 1956 room air conditioners offers such features as special financing, price protection for distributors and dealers and a "Buy-Back" plan to protect the dealer from end of the season inventories. In addition, expense paid trips will be given to dealers and their salesmen as rewards for exceptional selling efforts. Advertising planned for 1956 includes television commercials, national magazine and local newspaper advertising.

► A NINE DAY PAID VACATION in Paris was first prize in the Rheem Mfg. Co.'s recent water heater sales contest for wholesalers and dealers. Over 100 salesmen qualified for the Paris trip while second and third prizes — nine day vacations in Bermuda — went to various other wholesaler and dealer salesmen. Other prizes offered in the sales contest included television sets, movie cameras and golf clubs.

► MOVIES, DANCING AND DINNER were features of a recent dealer meeting held by General Heating and Air Conditioning Co., New Orleans air conditioning distributor. A special conference room had been engaged, and while the majority of the guests were enjoying the dancing, dealers would slip off to the conference room to discuss packaged air conditioners. The company reports that the atmosphere apparently was conducive to talking business. One dealer, it says, signed up for 20 units immediately.

► A CATALOG of automatic heating equipment is presented on two sides of a 34½ × 22½ in. three-color "line-flyer" recently issued by Iron Fireman Mfg. Co. The sheet, suitable for use as either a wall poster or a big direct mail piece, carries illustrations representative of all types of units available and lists the various sizes being offered.

► A RESIDENTIAL AIR CONDITIONING sales kit, known as the "Climate Kit" has been introduced by Worthington Corp. to over 700 air conditioning dealer personnel in meetings throughout the country. A light box beneath a diffused plastic surface, with a series of transparencies showing typical home diagrams, enables the dealer to show the home owner how various air conditioning installations can fit his particular home. The drawings relate the air conditioning installation to each given condition as to furnace location, space available, existing warm air system with ductwork, etc.



EXCELSIOR

Manufacturer of

- ★ Galvanized Snaplock Pipe, Elbows, and Angles
- ★ Gravity and Forced Air Snaplock Ducts and Fittings for Every Type of Warm Air and Air Conditioning Distribution System.
- ★ Stainless Steel Chimney Liners for Gas Heat Installations
- ★ Blued and Walnut Stovepipe and Elbows
- ★ A.G.A. Approved Gas Diverters (Horizontal and Vertical 3" to 10" Inc.)
- ★ Sheet Metal Specialties

**For Quality, Service and Value Buy Excelsior
THE COMPLETE LINE**

Write for Current Catalog 98 for
Details and Prices on Complete Line

THE EXCELSIOR STEEL FURNACE CO.

118 S. Clinton St. FRanklin 2-8120 Chicago 6, Ill.



— DIVISIONS —

EXCELSIOR HEATER & SUPPLY DIV.

The Excelsior Steel Furnace Company
879 Hersey Ave., St. Paul 4, Minn.
Telephone: MI dway 6-7255

EXCELSIOR HEATING SUPPLY DIV.

The Excelsior Steel Furnace Company
2 East 3rd Street, Kansas City 5, Mo.
Telephone: VI ctor 2-3715

BRX DIV.

The Excelsior Steel Furnace Company
One Industrial Rd., Wood Ridge, N. J.
Telephone: WE bster 9-2020

- for Greater Strength
- for Longer Wear
- for Lower Cost



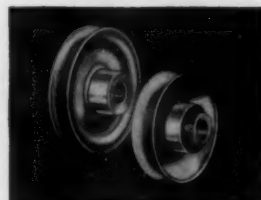
Zatko
One Piece
Stamped Steel
V-BELT
PULLEY
for
Heating and
Air Conditioning
Equipment

Standard Fractional
Horse Power V-Belt Pul-
leys. All sizes in stock.
Variable Pitch. Allows
Speed Variation up to
30%. OD's from 3 1/4"
to 3 1/2".

**ALL PULLEYS BROACHED
AND 100% INSPECTED**

Used by a majority of the
largest Automobile and
Heating-Air Conditioning
Manufacturers.

Write for literature
and prices



Zatko
Metal Products Co.
20850 St. Clair Ave., Cleveland 17, Ohio

appointments . . .

► **ROBERT J. MOORE** as sales manager, packaged products, for the Westinghouse Electric Corp.'s air conditioning division. He will be responsible for the sales activities on residential and commercial packaged air cooling and heating units as well as heat pumps. Mr. Moore, who has been with the firm's appliance division since 1948, comes to his new position from Los Angeles where he has served as Pacific coast district manager for consumer products. He has also served in various sales capacities in Seattle, Salt Lake City and San Francisco.

► **DOUGLAS S. STERNER** as manager of the air conditioning division of General Controls Co. with headquarters in Glendale, Calif. Mr. Sterner rejoined the firm after a year's absence during which time he acted as Atlanta district manager for Typhoon Air Conditioning Co., Div. of Hupp Corp. B. L. Lerch, formerly manager of the firm's Chicago branch, has been appointed midwest regional manager. Norbert A. Grainer succeeds him as manager of the Chicago branch. S. Alfred Walker, formerly associated with General Electric Co., has been appointed public relations representative.

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**YOUR
CUSTOMERS
WILL
SAVE
ON
FUEL
BILLS**

**kleen-aire
HEATING SYSTEMS**
operate more efficiently

COMFORTABLE ROOMS—
NO OBJECTIONABLE
DRAFTS

CLEAN, WARM AIR
COMES OUT HERE

ROOM AIR
RE-CIRCULATES HERE

Kleen-aire's amazing efficiency results from this panel that mixes about 35% warm room air with 65% fresh, clean, warm, filtered air from the furnace.

Floor and ceiling temperatures can be kept within 2 degrees

KLEEN-AIRE GAS FURNACES ARE GUARANTEED 10 YEARS

Kleen-aire furnaces are extremely quiet in operation, compact in size, attractive in appearance. Built of extra-heavy gauge steel for durability. Cooling unit is optional.

**kleen-aire
HEATING
SYSTEMS**

GET ALL THE DETAILS NOW FROM . . .



STEEL CITY FURNACE CORP.

Springdale, Penna.

Phone 1215

Exclusive territories still available in certain areas.

Write, phone or wire for full details



**TIME SAVING
E-Z-ON
DAMPER REGULATORS
PERMIT
INSTANT ASSEMBLY**

(Shown—head piece of #27 E-Z-ON)

**It's the little things that
make the Big difference!**

Advanced design of E-Z-ON damper regulators permits on-the-job Assembly with only a hammer — no drilling — no rivets. This 16 gauge steel regulator is simply positioned on the damper by sliding it over the scribed center line. The E-Z-ON accurately stays in position until a hammer blow drives the sharp prongs through the damper (E-Z-ON prongs will pierce 22 gauge metal.)

E-Z-ONS PROVED MORE PROFITABLE

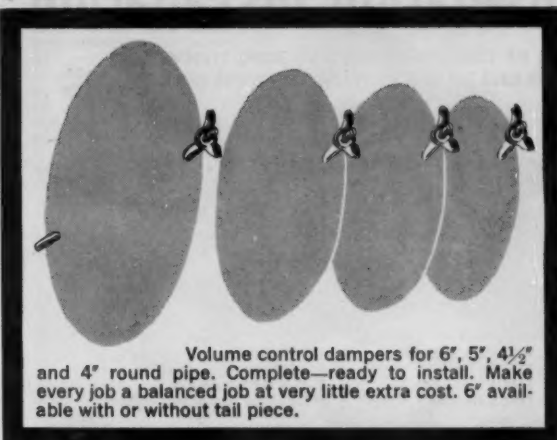
Job Histories prove that your apprentice or journeyman can save two-thirds of their damper makeup time with E-Z-ONS.

M. A. GERETT Corp.
724 W. Winnebago, Milwaukee, Wis.

Stocked in CANADA by
THERMIDAIRE CORP.
7-9 Cumberland Street, Toronto

STYLE & SIZE
Famous E-Z-ON standard design No. 27
Solid end and tail piece, threaded head piece and wing nut — $\frac{3}{8}$ " bearing.
Superior E-Z-ON "Snap-Tite" Design No. 29
Tail piece with retractable snap and bearing, threaded head piece and wing nut — $\frac{3}{8}$ " bearing.

Malco COMPLETE DAMPER
for the price of a quadrant



Volume control dampers for 6", 5", 4 1/2" and 4" round pipe. Complete—ready to install. Make every job a balanced job at very little extra cost. 6" available with or without tail piece.



No handles. Just loosen wing nut and adjust with screwdriver. Easy to do—yet it discourages house-holders from changing your adjustment. Stud only $\frac{3}{4}$ " long for easy installation.

Contact your jobber
or write today to

Malco

PRODUCTS

405 East 48th Street
Minneapolis 9, Minnesota

**NEW IMPROVED Vaporite
Automatic Humidifier**



Series 555

Corrosion Resistant
Stainless Steel
Vapor Pan 4" x 15"

ONE SIZE... ONE KIT ASSURES LOWEST
COST INSTALLATION AND MINIMUM
INVENTORY EXPENSE

Vaporite No. 555 Humidifier comes completely assembled in one package. No extras to buy... no parts to assemble... no extra holes to cut... no pan leveling or tricky mounting.

NEW IMPROVED VALVE — Provides more positive drip-feed thermostat operation. Water drips fastest when furnace is hottest... pan is dry when furnace is cold. Adjustable for precise vaporization needs of each installation.

Write for Catalog A-1

AUTOMATIC HUMIDIFIER CO., Cedar Falls, Iowa

**NOW! 10 PRODUCTION
TOOLS
COMPLETE
IN ONE TOOL
FOR \$460.00
ONLY
F.O.B. WAUKEGAN, ILL.**

No. 1826
Patented.
SMITH'S 180° Universal Brake combines the usefulness of 5 familiar tools with 5 new ones as illustrated below... This brake will silence a lot of hammering in the average sheet metal shop, at a profit!... It is adapted to permit selective bending of portions of a work piece without restriction!... It will handle 18 gauge mild steel 26" wide to 7 gauge 1 1/4" wide, at any angle, up to 180° in one operation!... It has adjustable angle stops and back gauges to assure precise duplication of work pieces, making it a very valuable production tool. Write for more information.

THE PRODUCT OF 5 FAMILIAR TOOLS



THE PRODUCT OF 5 NEW TOOLS



R. E. SMITH

1124 ELIZABETH
WAUKEGAN, ILL.

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kleen-aire

HEATING SYSTEMS

operate more efficiently

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Springdale, Penna. Phone 1215

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PERMIT
INSTANT ASSEMBLY**

(Shown—headpiece of #27 E-Z-ON)

**It's the little things that
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E-Z-ONS PROVED MORE PROFITABLE

Job Histories prove that your apprentice or journeyman can save two-thirds of their damper makeup time with E-Z-ONS.

M. A. GERETT Corp.

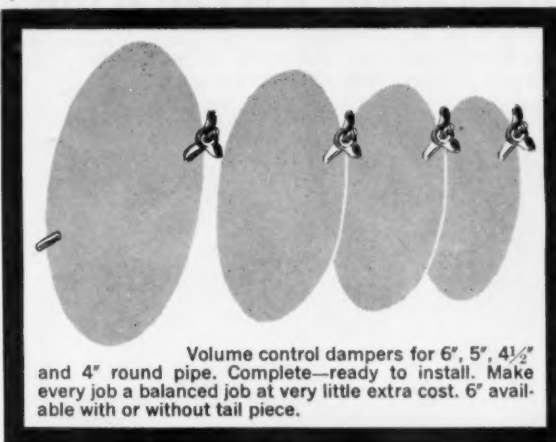
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Stocked in CANADA by
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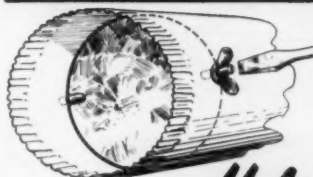
STYLE & SIZE
Famous E-Z-ON standard
design No. 27
Solid end tail piece, threaded
head piece and wing nut —
3/8" bearing.

Superior E-Z-ON
"Snap-Tite" Design No. 29
Tail piece with retractable
snap end bearing, threaded
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Malco COMPLETE DAMPER
for the price of a quadrant



Volume control dampers for 6", 5", 4 1/2" and 4" round pipe. Complete—ready to install. Make every job a balanced job at very little extra cost. 6" available with or without tail piece.



No handles. Just loosen wing nut and adjust with screwdriver. Easy to do—yet it discourages house-holders from changing your adjustment. Stud only 3/8" long for easy installation.

Contact your jobber
or write today to

Malco PRODUCTS
405 East 48th Street
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**NEW IMPROVED Vaporite
Automatic Humidifier**



Series 555

**Corrosion Resistant
Stainless Steel
Vapor Pan 4" x 15"**

**ONE SIZE . . . ONE KIT ASSURES LOWEST
COST INSTALLATION AND MINIMUM
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THE PRODUCT OF 5 FAMILIAR TOOLS



THE PRODUCT OF 5 NEW TOOLS



R. E. SMITH 1124 ELIZABETH
WAUKEGAN, ILL.

Use *Stic-Klip*® for Insulation Installation

ON AIR CONDITIONING AND VENTILATING SYSTEMS
FOR COLD STORAGE PLANTS, BUILDINGS AND SHIPS.



- 1 TYPE B with Locking Plate
- 2 TYPE B
- 3 TYPE A
- 4 TYPE S ADHESIVE
- 5 SPRING TUBING CLIP 1/4" and 3/8"
- 6 HOLDING PLATE used with Type A and B
- 7 TYPE N with Speed Washer
- 8 INSERT BASE Securing Signs, Wall Cabinets, etc.

Stic-Klips permanently bind almost any insulating material to masonry, wood, metal — flat, corrugated, curved, unusual-shaped. This modern method eliminates drilling, puncturing metal — saves time and money.

For illustrated booklet on any of these applications,
write Dept. AA

Stic-Klip MANUFACTURING CO.

52 Regent St., Cambridge 40, Mass.

FLANGES THE DUCT with Amazing Speed!

Less than 5 seconds on short
and lighter pieces . . .
Slightly longer on bulkier pieces

MAKES PERFECT DRIVE-CLEATS TOO!

The ONLY tool that does both.
A complete drive cleating tool . . .
no set-up time . . . no adjustments.
Handy to take out to the job when
not needed in the shop. Turns idle
time into production time. Flanges
any square duct up to 20 gauge.
Quickly pays for itself in time,
material and labor savings.



No. 12 Smith's Cleat Bender

(12" wide) . . \$49.80*

No. 18 Smith's Cleat Bender

(18" wide) . . \$78.60*

*F.O.B. Waukegan, Illinois
Prices subject to change
without notice

PERFECT
DRIVE CLEATS
fit the duct without
the use of a screwdriver.
TREMENDOUS SAVINGS
in erection time and labor.

R. E. SMITH

1124 Elizabeth Avenue • Waukegan, Illinois

appointments

(Continued)

R. B. Hamilton and John E. Ballew. Other new district managers are Robert W. Lamb, New York region; Thomas B. Sexton, west coast region; and Garnet Walter Lunsford, Atlanta. Elmer F. Voss has been named a field engineer for the Atlanta region.

► H. W. SOMERSHORE as manager of the Richmond, Calif. branch of the Armstrong Co., succeeding Robert E. McIntosh, who is being transferred to the company's general offices in Chicago. Mr. Somershoe was formerly manager of the Detroit branch, in which capacity he is being succeeded by R. J. Fowler.

► MERRILL F. YALE as manager of the Lincoln Electric Co.'s newly opened district office at 1224 Walnut St., Denver. Scotty Lambrecht will assist Mr. Yale. Ray Zeh has been made district manager of the company's Chicago office and Joseph Chemerys has been named district manager in Syracuse.

► RICHARD K. CHAPMAN as branch manager of the Detroit office of the Unitary Equipment Div., Carrier Corp. Prior to his recent appointment he was self-contained equipment manager in the company's Philadelphia district office. Theodore F. Preston has been

REPAIR PARTS

for STOVES, FURNACES and BOILERS
GAS • OIL • COAL • ELECTRIC

TRY US FOR THOSE HARD TO GET ITEMS

JOBBERS OF FIREPLACE FIXTURES • FIRE-
PLACE CIRCULATORS • INCINERATORS •
BARBECUE OVENS AND GRATES & DOORS
METZNER STOVE and FURNACE SUPPLY

COMPANY

413 DELAWARE ST.

K.C. 5, MO.

Est. 1880



ADAMS Flue Thimble (Cast Iron)

Adams Cast Iron Flue Thimbles
insure Permanence, Tighter Fit,
Better Draft.

Sizes 4 to 12 inches
Buy Adams Known Quality

THE ADAMS COMPANY

Bridge Street

Established 1883

Dubuque, Iowa

**A FAMOUS NAME IN HEATING BRINGS YOU
NEW PROFIT ADVANTAGES ON GAS
CONVERSION BURNER INSTALLATIONS**

**THE
BANNER "JET-8"
BURNER**



**THE JET-8 IS A SUPERIOR NEW DESIGN AND CON-
STRUCTION WITH UNMATCHED ADVANTAGES FOR YOU:**

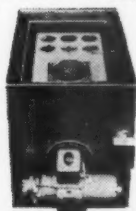
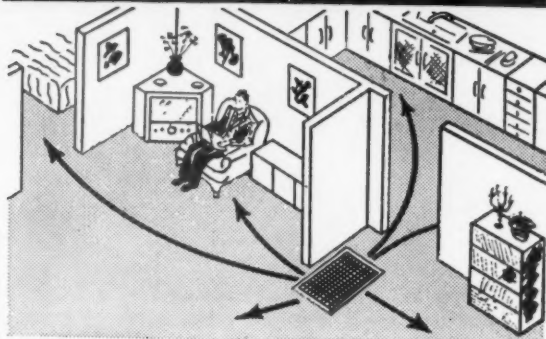
- Designed to eliminate all delays and difficulties when installing—telescoping venturi, compact parts, other design elements provide a truly universal unit to fit all furnaces and boilers.
- Top quality components throughout, such as one-piece chrome alloy cast iron burner head, Minneapolis-Honeywell Powerpile controls, assure customer satisfaction, eliminate costly callbacks and adjustments.
- Completely competitive price despite highest quality.
- Full input range—80,000 to 200,000 BTU—delivered assembled, ready to install.

**TEST FOR ALL PROFIT LEAKS AFTER EACH
INSTALLATION AND YOU WILL SWITCH TO THE JET-8**
You owe it to your business to get full details. Write.

BANNER BURNER COMPANY

227 EAST INDIANOLA AVENUE, YOUNGSTOWN, OHIO

**New! Factory Assembled
GUN TYPE
Oil Fired FLOOR FURNACE**



Can Be Installed in 3 or 4 Hours

BURNS NO. 2 FUEL OIL
Equipped with Minneapolis Honeywell
Safety Controls

A compact steel floor furnace, effi-
ciently designed with a pressure atomiz-
ing oil burner. Do not confuse this unit
with kerosene burning floor furnaces.

QUIET AUTOMATIC BURNER CORP.

33-35 BLOOMFIELD AVE.

NEWARK, N. J.

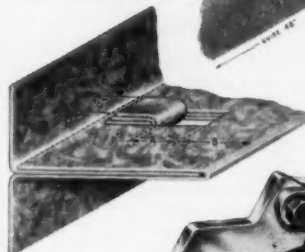
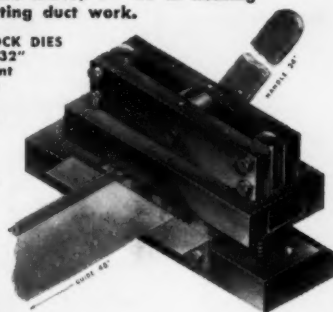
—THOR QUALITY TOOLS —

Are time and money savers in heating
and ventilating duct work.

THOR GOVERNMENT LOCK DIES
shear — punch a 5/32"
hole — and mark point
at breakline, all in one
operation.

Model No. 100, \$115.00
Capacity, 22 ga.
Cuts 1" locks.

Illustrated:
Model No. 200, \$160.00
Capacity, 18 ga.
Cuts 1 1/8" locks



**THOR
CLIP PUNCH
UNIVERSAL**
completes lock in
one operation —
Saves 50% labor —

Pat. pend.
Model No. 300-1
Capacity: 3 sheets
of 20 ga. metal.
Price, \$42.50

New sensational tool for fastening government locks and standing
seams.

See your local dealer or write for literature and samples of
metal sheared in above tools.

Thor Tool and Die Co.

865 Estabrook St.,
San Leandro, Calif.



**THIS DEVIL BRINGS
YOU EXTRA PROFITS!**

Not from the sale of stock pan evaporator plate type
humidifiers but from the merchandising of the Walton
Model WF.

Chase "Devil Dryness" from customers' homes with a
humidifier of top performance, revolutionary operating
principle. NO JETS — NO PANS — NO PLATES — No
service headaches.

Now you can keep warm air customers contented cus-
tomers by giving them "positive humidification" at a
price that can earn profit never before realized. Write
today for the "Devil Dryness" merchandising plan and
your copy of the free dry air detector.



Walton Laboratories, Inc., Irvington 11, N. J.
Dept. AA-1

Please send "Devil Dryness" Merchandising Plan and
free Dry Air Detector.

Name of firm _____
Address _____
City _____ Zone _____ State _____

In to stay when you use



Hardened Screwnails

for fastening
SHEET METAL to WOOD
WOOD to WOOD
or other fastenings
where you need
NAIL DRIVING SPEED with
SCREW HOLDING POWER

Ask your P-K Distributor for samples and the SCREWNAIL folder, or write:
Parker-Kalon Division, General
American Transportation Corporation,
Clifton, New Jersey.

PARKER-KALON®
FASTENERS

appointments

(Continued)

appointed residential air conditioning specialist in the Cleveland office of the division. Mr. Preston joined the company in 1940.

► **PAUL F. NEESS** as sales manager of heating and air conditioning controls for Soreng Products Corp. Prior to joining Soreng, Mr. Neess was manager of field engineering for General Controls, Inc., and before that was product manager of the Controls Div., Perflex Corp. Frederick Morawetz has been named manager of research and development for the firm's Central Engineering Div.

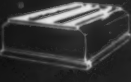
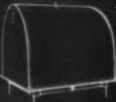




Paul F. Neess



C. M. Drenning

► **CHARLES M. DRENNING** as national service manager for Crise Controls Div., Acro Mfg. Co. He has

Swartwout Roof Ventilators

for every industrial, commercial and institutional need

Gravity Ventilators

Airmover	Dexter Heat Valve
Gravity Valvent	Rotary
Low Line Gravity	

Powered Ventilators


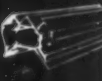
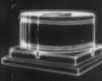

Airjector	Powered Valvent
Airlift	Whirlout
Low Line Powered	Airlift Junior

Louvers

Airlouver	Industrial Louver
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Fire Ventilation

Swartwout Fire-Valve

Write for Bulletin 3513
EXPERIENCED VENTILATOR MANUFACTURERS SINCE 1904

18511 Euclid Avenue, Cleveland 12, Ohio

The Swartwout Co.

Roof Ventilators and Ventilating Louvers

POWER PLANT EQUIPMENT • PROCESS INDUSTRY CONTROLS

BOSTON DRAFT STABILIZER

WORLD'S MOST ACCURATE DRAFT CONTROL

Guarantees Constant Draft
and protects your heater against draft variables that destroy efficiency!

Now Available
in 6", 7", 8", 9" and LARGER SIZES up to 24". All available with or without TEE section. TOPS in ability to hold draft yet the EASIEST to install.

No Weights To Adjust. Can be properly set, even without instruments.



OPERATE YOUR HEATER AT PEAK EFFICIENCY with ACCURATE DRAFT CONTROL

BOSTON DRAFT STABILIZER

1. Slows down travel of gases thru the heater to a desired CONSTANT speed so heater can absorb the heat before it reaches the stack.
2. Holds a constant draft because variations in draft-pull result in changes of air delivery from the burner fan, causing changes in smoke content and CO₂ of your combustion.

Write for complete details

BOSTON MACHINE WORKS COMPANY

Oil Heating Supplies Division, Manufacturers, Lynn, Mass.

been associated with the division for over seven years, serving in various executive capacities.

► **NORMAN J. E. O'BRIEN** as manager of the Detroit sales region for Delco Appliance Div., General Motors Corp. The region comprises the states of Michigan, Indiana and Kentucky as well as parts of Ohio and West Virginia. Mr. O'Brien joined the division as a salesman in 1941.

► **J. K. SCHAEFFER** as district manager of the Chicago area for Thermo-Products, Inc. Before his recent appointment, Mr. Schaeffer represented Lennox Industries, Inc. in Tennessee and southern Illinois.

► **ROBERT L. BLUHM** as a district sales manager for Iron Fireman Mfg. Co. He will appoint and assist dealers and distributors in West Virginia, part of Ohio and part of Kentucky. Philbert J. Schumacher was named a district sales manager to work with dealers and distributors in the Philadelphia area.

► **ROY C. TUNELIUS** as sales representative in parts of Indiana and Michigan for Inland Steel Products Co. He will work out of the firm's Chicago branch office at 4301 S. Western Ave. Bill Lee Lupher has been appointed sales representative in the Houston, Texas area.

NEW IMPROVED SQUARE DUCT HANGER

With new "Positive Lock" cam action feature . . . No Special Tools! Hammer does the Job! Available in six lengths.

PAT. NO. 256 3242

A. Round Pipe Hanger used when joist is offset from duct

B. Simple Application of Square Duct Hanger as shipped to you

DUCT

SQUARE DUCT HANGER

No. 15

AS LOW AS **2 1/2¢** EACH

SEE your **SUPPLIER** or **WRITE** for **FREE samples** TEST THEM YOURSELF ON THE JOB!

A. M. HEXDALL CO. MORRIS, ILLINOIS

Manufacturers of Sheet Metal Specialties

- Sharp prong pierces
- Insert "Positive Lock"—tap in place
- Drive sharp prong into joist

**Make Stronger Fastenings
this easy way**

P-K
TRADE MARK
REG. U.S. PAT. OFF.

Hardened Masonry Nails

DRIVE EASILY into mortar, cinder blocks, and other soft masonry without pilot holes . . . into pre-drilled holes in harder materials.

HARDNESS and TOUGHNESS perfectly balanced . . . they drive in straight to stay tight, even under shock or vibration.

COST YOU LESS and are much simpler to use than plugs, expansion bolts, other devices. Samples free . . . try them. Ask your P-K Distributor, or write: Parker-Kalon Division, General American Transportation Corporation, Clifton, New Jersey.

**PARKER-KALON®
FASTENERS**

INSTANT LIGHTING

Insto-Gas

T. M. REG. U. S. PAT. OFF.

SOLDERING IRON HEATER

INSTANTLY FIRED SOLDERING IRONS

Sheet metal contractors can now have hot soldering irons in 2 minutes and with Insto-Gas they can be kept at the desired temperature all day long without even looking at the heater. Insto-Gas saves 40% on fuel cost and enough time to pay for the entire equipment in one week's operation.

The Insto-Gas soldering iron heater when attached to the cylinder by 50-ft hose can be operated on a scaffold or roof without moving the cylinder.

These Insto-Gas soldering irons are designed for continuous operation with no stopping to change irons. Made in two sizes; the No 1-S (2) for fine work and the No 2-S (5) for heavy soldering.

Listed by Underwriters Laboratories and Factory Mutuals Laboratories

Write For Free Folder

INSTO-GAS CORPORATION
DETROIT 7, MICHIGAN
ASK FOR NEW FOLDER ON INSTO-NOT SALAMANDERS



WHO-O-O

**MAKES
BETTER
CONTROLS?**

See page 60

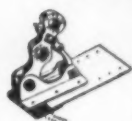
ORNAMENTAL LEADER STRAPS



3", 4", 5" 2", 3", 4"
Sizes Sizes

"Rival" & "Fitrite"
Ornamental Leader
Straps — Copper
& Zinc in 6 styles
SOLD THROUGH
JOBBER ONLY

ADJUSTABLE PIPE SNOW GUARDS



"FITRITE"
3 pipes,
3/4" I.P.S.
For all
types
of steep
roofs



"PROTECTOR"
2 Pipes,
1/2" I.P.S.
For smaller
roofs, new
or old.

"FITRITE" SKYLIGHT GEARING



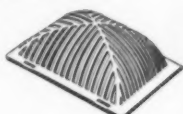
3/8", 1/2", 1"
Hook or chain
operation 1/2"
Gearing as-
sembled on
20" pipe

"FITRITE" ROOF STRAINERS

Bronze and Aluminum



BEEHIVE
3"-8" round.
Also 3" x 4",
4" x 5"
square



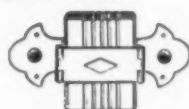
3 Types
6", 8", 10",
12" square

"FITRITE" 3-WAY CLAMP

A New Vise-grip Made
Exclusively For Us



"FITRITE" CAST BRONZE HINGED LEADER BAND



Made for
3" & 4"
square
corrugated
also 3" &
4" round

Portable Electric SAW GUN



"FITRITE" ADJUSTABLE SWING CHIMNEY JACK FRAME



Five sizes
in one
For 6"-10"
pipe.

To Protect Trade Please Use Printed Stationery

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TELEPHONE: CHELSEA 3-2400-2401

SEE OUR
CATALOG
IN
SWEET'S FILE
ELECTRICAL

appointments

(Continued)



J. A. Fairfield



C. Barry Neill, Jr.

► J. A. FAIRFIELD as sales representative in the Chicago sales district of Gustin-Bacon Mfg. Co. His territory will include parts of Wisconsin, Illinois and Iowa. R. E. Van Winkle will handle sales in Michigan as well as parts of Indiana and Ohio. C. Barry Neill, Jr. will cover Alabama, western Tennessee and western Georgia.

► SAMUEL S. NEIDE & ASSOCIATES, Gaithersburg, Md., as representatives of the Connor Engineering Corp. in Maryland, Delaware, Virginia, West Virginia and North and South Carolina. Samuel T. Polk, Jr., Starkville, Miss., will represent the company in Mississippi and southern Louisiana. Gene Brown, San Antonio, will represent the company in Texas.



**THIS
AUTO
LAUNDRY
HAD TO
CLOSE
IN COLD
WEATHER
... until a
Delta
OIL
UNIT
HEATER
was
installed!**

PROBLEM: In winter, with both doors open, wash water froze on cars and this auto laundry had to close down.

SOLUTION: A Delta oil-fired unit heater was installed near the entrance. It suited this installation perfectly because it requires no large chimney, boilers or pipes, it suspends out of the way and operates on low cost #2 oil.

RESULTS: When the outside temperature is 0°, temperature through the long building is now 50° with both doors open. The Delta Unit Heater extended business hours and increased profit considerably.

Send for complete
new catalog A

This is only one of hundreds of jobs that a Delta OIL Unit Heater can do better and more economically.

DELTA HEATING CORPORATION
TRENTON 8, NEW JERSEY



**THE GREATEST PUNCH
WE EVER MADE...**



IN USE ALL OVER
THE WORLD . . .

**THE FAMOUS
WHITNEY-
JENSEN
No. 5 JR.
HAND
PUNCH**

**CAPACITY
MILD STEEL
1/4" thru 16 ga.**



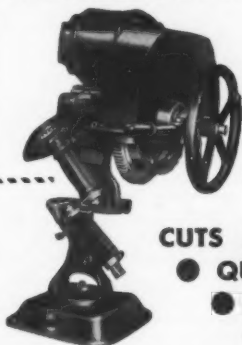
**IN METAL
BOX WITH 7 PUNCHES
AND DIES**

Write for BIG NEW CATALOG

WHITNEY METAL TOOL CO.
702 Forbes St., Rockford, Illinois, Since 1910

**THE RIGHT SHEAR
FOR ANY CUTTING JOB**

MARSHALLTOWN



**ROTARY
THROATLESS
SHEARS**

CUTS ALL SHAPES—SIZES

- **QUICKER**
- **EASIER**
- **FASTER**

Here's a shear that's right for every job. Speedy — efficient. Cuts up to 1/4 inch stock — speed to 6 ft. per minute. Excellent for irregular cutting or straight splitting. Available in hand operated or motorized models. Prompt shipment. Send today for special illustrated bulletin.

**MARSHALLTOWN
MANUFACTURING COMPANY**
Marshalltown, Iowa

"CORRECT PRACTICE in OIL HEATING"

NOW AVAILABLE TO YOU!

A complete reprint of the valuable series

by J. J. Mirabile

This practical series covers every angle of oil burner work, including arrangement of shop . . . stocking of parts . . . record-keeping . . . installation procedures . . . the handling of crews . . . how to make heating surveys . . . how to size combustion chamber . . . how to install thermostat . . . how to start the burner . . . how to use testing instruments . . . and how to operate a service department. It contains, as well, a complete list of causes and cures of oil burner troubles that will serve as a reliable guide in making service calls.

Every shop handling oil burner jobs should own this book. Full size, 8 1/2 by 11 inches — 57 pages of practical helps. Send \$1.00 for a copy to the address below.

KEENEY PUBLISHING COMPANY

6 No. Michigan Avenue

Chicago 2, Ill.



AJAX

**PRE-FABRICATED
DUCTS and
FITTINGS**

the complete streamlined
line . . .

For extra profits, use AJAX Pipe and Fittings . . . save installation time and labor . . . fit tight and fast with AJAX Automatic Snap Lock connections.

FORCED AIR and GRAVITY INSTALLATIONS!

- Precision Made
- Highest Quality
- Quickly Assembled

WRITE TODAY for line catalog giving full data.

AJAX FURNACE FITTING CO.
216-220 E. Front St., Cincinnati 2, Ohio
Division of The Cincinnati Sheet Metal
and Roofing Co.

Obituaries

Walter H. Dreis

WALTER H. DREIS, 67, president, treasurer and general manager of Dreis & Krump Mfg. Co., Chicago, died December 8, 1955. Mr. Dreis was the son of Herman C. Dreis, one of the founders of Dreis & Krump. He is survived by his wife, three daughters and a brother.

S. Arthur Loeb

S. ARTHUR LOEB, chairman of the executive committee, Webster Electric Co., died at his home in San Diego, Calif. Sunday, December 4, 1955. Mr. Loeb was 69 years old. He joined the Webster company in 1909 and served as sales manager and secretary-treasurer, becoming president in 1926. He was elected chairman of the board in 1952 and chairman of the executive committee in 1954.

Harold S. Sharp

HAROLD S. SHARP, 67, president of the Sharp Heating Supply Co., Cleveland, died December 8, 1955, at his home in Lakewood. Mr. Sharp had headed the concern since 1942. Prior to that he had spent 23 years

as vice president of the Henry Furnace & Foundry Co. He was well known for his activity in association work and was a past president of the National Warm Air Heating and Air Conditioning Association. He is survived by his wife, two sons and a daughter.

Ralph Ward Blanchard

RALPH WARD BLANCHARD, 77, former president of the Hart & Cooley Mfg. Co., died at his home in Miami, Fla. on November 19, 1955. Mr. Blanchard joined the firm as a salesman in 1914 and later served in several official capacities, becoming president in 1928. He retired in 1951, at which time he became honorary chairman of the board of directors. He is survived by his widow and one grandson.

Edward J. Wettrick

EDWARD J. WETTRICK of the Wettrick Supply Co., Painesville, Ohio wholesalers, died December 10, 1955 at his home in Cleveland Heights. Mr. Wettrick was at one time a partner in the Stevens Supply Co., Cleveland. He is survived by his wife, a son and two daughters.

Check FAMOUS FOR SERVICE

Each of OUR organizations is committed to a firm policy of the "best possible service" to every Warm Air Dealer, Sheet Metal Contractor and Roofer in the areas we are serving.

THE FAMOUS FURNACE CO.

The Famous Furnace Co.
of Akron, Ohio

The Famous Furnace Co.
of Lorain, Ohio

The Famous Furnace Co.
of Steubenville, Ohio
The Famous Furnace Co.
of Mansfield, Ohio
The Famous Furnace Co.
of Warren, Ohio

CLEVELAND, OHIO

The Famous Furnace Co. and Supply Co.
Uniontown, Pa.

The Famous Furnace & Supply Co.,
Wheeling, W. Va.

COMPLETE ONE-STOP SERVICE AT ANY OF THE ABOVE LOCATIONS

FURNACES • COOLING EQUIPMENT • ROOFING • SHEETS • ACCESSORIES • MACHINERY • TOOLS



Shown being loaded at Kirk & Blum's inside loading dock are eight Design 5 Centrifugal Collectors, elbows, prefabricated Collector Cones (requiring only bolting for assembly), and large blow pipe.

KIRK & BLUM WILL FURNISH YOUR REQUIREMENTS FOR BLOW PIPE PARTS, CYCLONE DUST COLLECTORS AND SUPPORTS. WRITE FOR LITERATURE AND PRICES.

THE KIRK & BLUM
MANUFACTURING COMPANY
3180 Forrer Street Cincinnati 9, Ohio

Copper - Brass - Bronze
Perforated
To YOUR REQUIREMENTS

PERFORATED METALS
FOR ALL INDUSTRIAL USES
ARCHITECTURAL GRILLES

New Catalog, No. 39, gives complete information.

DIAMOND MFG. Co.

BOX 34 WYOMING, PA.

SUPER-JET GAS CONVERSION BURNER

... is the answer!

Super-Jet's advanced engineering has developed a silent, automatic, multi-jet type conversion unit for complete heating comfort.

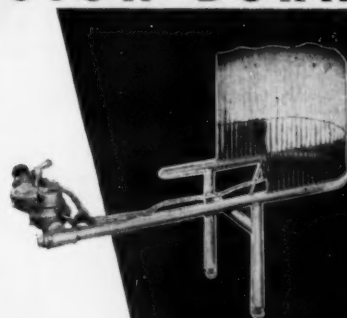
This burner generates own current for completely automatic and safe operation, not dependent on any outside source for current. Designed for natural gas — certified by AGA — with a consumer guarantee.

Some territories still open for manufacturers' representatives calling on wholesalers.

WRITE TODAY TO

DOWNING STEEL PRODUCTS CO.

4005 SMITHVILLE ROAD
DAYTON 9, OHIO



ORNAMENTS

STAMPINGS & SPINNINGS

Zinc Ornaments Available From Stock. Copper, brass, bronze, aluminum and stainless steel ornaments made up promptly.

If you don't have catalog K, send for it NOW.

MILLER & DOING

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BROOKLYN, N. Y.

•BB•

IN STOCK FOR IMMEDIATE SHIPMENT
STAINLESS STEEL

"PRE-WAR" QUALITY.
ROOF DRAINAGE.

FULL LINE

EAVE TROUGH HALF ROUND

STYLE "K" GUTTER

CONDUCTOR PIPE

ALL FITTINGS AND ACCESSORIES.

SOLD THRU LEADING JOBBERS EVERYWHERE

BERGER BROS. CO.

229-237 Arch Street

Philadelphia 6, Pa.

MANUFACTURERS OF

FURNACE PIPE AND FITTINGS,

Prefabricated Ducts,

also conductor pipe, eaves

trough, drip edge, rake strip, etc.

THOR METAL PRODUCTS CO., INC.

Box 118 Eastwood Station

Syracuse, N. Y.



MAKES CONTROL
INSTALLATION
EASIER?

See page 60

Address Changing? Tell Us At ONCE!

A new postal regulation relating to the handling of undelivered mail may result in some issues of *American Artisan* being thrown away instead of being returned to us — as they have been in the past — for remailing to your new or correct address.

To avoid missing any issue of *American Artisan* it is more important than ever to report both your new and old address to us and your post office. Deadline is the 18th of the preceding month for the next issue. Send changes — and new local postal delivery zone — to

AMERICAN ARTISAN

6 N. Michigan Ave., CHICAGO 2, ILL.

ORIGINAL REPAIR PARTS for
FURNACES PUT OUT BY
AMERICAN FURNACE & FOUNDRY CO.
HOMER FURNACE CO.
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MONITOR FURNACE CO.
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also

Repairs for other makes such as: PENINSULAR, LAUREL, GARLAND, HOME, HOLLAND, KALAMAZOO, JEWEL, IDEAL, WILLIAMSON, AGRICOLA, ETC.

Phone 5322 — Write — Wire

LIVINGSTON, INC., MARSHALL MICHIGAN

Your warm air heating supply house

Classified Advertising

Rates for classified advertising are 12 cents for each word, including heading and address. One inch \$6.00. Count nine words for keyed address. Minimum \$2.00. Closing date 20th of month preceding publication.

for sale . . .

FOR SALE — Well established small plumbing and heating supply house located in Kentucky and doing a nice business. Owner has factory representative lines which conflict — reason for selling. Can be bought for \$75,000.00 not including buildings which can be purchased for an additional \$20,000.00. For particulars address Key 1023, American Artisan, 6 North Michigan Ave., Chicago 2, Illinois.

Heating and air conditioning business together with sheet metal shop. Located in large Ohio city. Gross about \$80,000 per year. Fine reputation with 10 years under present name. Have franchise for finest equipment. Owners net income averaged 11.6% over past five years. Will sell with or without property and building. Priced at current and fixed assets less current liabilities, about \$15,000, without property, of which approximately \$10,500 is accounts receivable and cash. Address Key 1024, American Artisan, 6 North Michigan Ave., Chicago 2, Illinois.

1/4" Ribbed Wire Glass, Stock Sheets, 30c sq ft., cut sizes slightly extra, plus boxing, F.O.B. our warehouse, Atcheson Glass Co., 920 Main St., Buffalo, New York.

1 set blades in perfect condition for Pexto Model S-21203, Serial G-7091 10 foot power shear. Address Key 1025, American Artisan, 6 North Michigan Ave., Chicago 2, Ill.

**Watch This
Space Each
Month For Real
Bargains!**

SERVICE SECTION

Rates for display space in the Service Section are \$12.00 per inch per insertion. One-inch minimum space accepted. Closing date — twentieth of the month preceding issue.

This section represents an ideal opportunity for manufacturers to get their messages across to readers of a national publication in their field. Whatever you make or sell, you'll find a large, receptive audience, easily reached at a minimum outlay. Plan now to move your products quickly and economically with consistent advertisements in this section.

the "Fit-All" SAW BLADE

PAT. PEND.

FITS ALL RECIPROCATING SAWS

TOP QUALITY AT A POPULAR PRICE

FITS { • RCS SUPERSAW • MILWAUKEE SAWZALL • KEY HAK
• SAW CHIEF • PLUS MANY OTHERS • TRI-SAW

Write for descriptive catalog page
Look For The Orange and Black Box

I-B-C
INDEPENDENT
BLADE COMPANY
587 THOMPSON AVE.
EAST HAVEN 12, CONN.

ALL STYLES

SKYLIGHTS

ALL SIZES

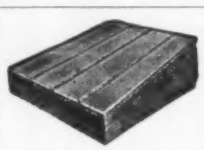
WILLIS SKYLIGHTS are designed to give a maximum of light with perfect ventilation. Constant improvement for over forty years, guarantees WILLIS customers greater value, both in construction and workmanship.

Willis skylights are constructed with condensation gutters on all bars and at the eaves to carry away the moisture. They are water-tight without the use of putty and are easily installed on old or new buildings.

Our engineering department will be glad to assist you in your skylight problems.



No. 705



No. 305

WILLIS STEEL CORPORATION

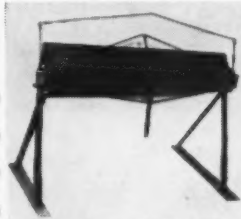
Galesburg, Illinois

Established in 1891

SEND FOR CATALOG

VYKE BRAKES

30", 90 lbs., \$38.00
36", 100 lbs., 43.50
48", 125 lbs., 60.00
61", 150 lbs., 72.00



SHEAR, Compound Handle, open end, 14 ga. \$29.00
15" Folder, 24ga., \$16.50, 36" Size 26ga., \$28.00,
16 ga. Sheet Metal Bender, 49" Size \$42.00.

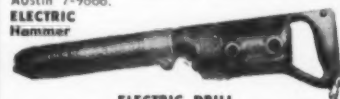
Order direct or send for Catalog
VYKE MFG. CO.

4158-T Jason St., Denver 11, Colo.

GREATER BUILDING IN 1956

calls for more and better time and labor saving tools. Get data NOW and be sure to have a Wodack "Do-All"® Electric Hammer and Drill for the jobs where there's drilling to do—in masonry, metal, wood. Put one on every job. It's the workmen's ready helper. Saves your time and their temper. Twenty types of hammer tools for drilling, chipping, scaling, grooving, etc. You can't buy a more useful power tool. Bulletin 510-AA. WODACK ELECTRIC TOOL CORP., 4627 W. Huron St., Chicago 44, Ill., U.S.A. Phone AUstin 7-9866.

**ELECTRIC
Hammer**



**ELECTRIC DRILL
WODACK® ELECTRIC TOOLS SINCE 1916**

SHEET METAL MACHINES & TOOLS

Lockformer Pittsburgh Machines
Lockformer Cleat Machines
Chicago Hand Brakes
Chicago Press Brakes
Pexto Power Shears
Pexto Foot Shears
Savage Nibblers

Marshalltown Presses
Pexto Rotary Machines
Pexto Slip Rolls
Pexto Bar Folders
Smith Cleat Benders
Pear Spot Welders
Reed Power Rolls

Whitney Punches
Whitney Foot Presses
Wildier Slitters
Pexto Mechanic's Tools
Black & Decker Electric Tools
Bett-Marr Bandsaws
Punches and Dies

Wysong & Miles Power Square Shears

When in Chicago, visit our Machinery Showroom

COMPLETE LINE OF SHEET METAL & VENTILATING SUPPLIES

SEND FOR
NEW
CATALOG

CENTRAL-WEST MACHINERY CO.

335 S. WESTERN AVE.

CHICAGO 12, ILL.

PHONE: HAYmarket 1-0900

**PROMPT
DELIVERY
AVAILABLE**

COMING!
"A NEW
STANDARD
OF QUALITY"
FOR THE
OIL-FIRED FIELD!

BIG
J
WATCH FOR IT!

SERVICE SECTION

Rates for display space in the Service Section are \$12.00 per inch per insertion. One-inch minimum space accepted. Closing date — twentieth of the month preceding issue.

ADJUSTABLE ELBOWS

Registers and Grilles
 Deliveries from Stock

Juniper Elbow Co. Inc.
 72-15 Metropolitan Ave.
 Middle Village, L.I., N.Y.



RUBBER LADDER SHOES

for safe climbing
 ... Order today.

JOHNSON
LADDER SHOE CO.



Eau Claire, Wisconsin

TOOLS for the ROOFING CONTRACTOR

AXES
 BEAMS
 BRACKETS
 BROOMS
 BUCKETS
 BUGGIES
 CAULKING GUNS
 CAULKING CEMENT
 DIPPERS
 FELT LAYER
 HATCHETS

HOISTS—PORTABLE
 HOISTING WHEELS
 HOOKS
 "HOTSTUFF" CARRIERS
 INSULBRIC CUTTERS
 KETTLES
 KNIVES
 LADDERS
 LADDER JACKS
 KNOT BRUSHES

MOPS:

MOP BELLS
 MOP HANDLES
 NAILS, CONCRETE
 ROPE
 SCRAPPERS
 SLATERS' TOOLS
 TROWELS
 WHEELBARROWS

JEWEL
 FREY PATENT
 CABLE CORD
 SOFT YARN
 GLASS

FRANK P. FREY & CO.

2634 W. MADISON STREET

CHICAGO 12, ILLINOIS

Drive
Cleat
Notcher



Handles up to 3" wide,
 22 ga. or lighter. Hand
 or foot operation. Mounts
 on bench, or on job with
 clamps, or bolts and
 screws.

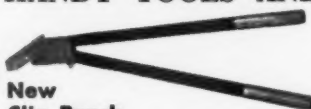
REINER & CAMPBELL CO., Inc.

HANDY TOOLS AND EQUIPMENT

New Clip Punch

For fastening slips or seams
 on ducts. Will push a "half
 moon" through 3 thicknesses
 of 13-ga. steel. No hammer-
 ing or flattening out to fas-
 ten slip to the duct.

COMPLETE LINE OF SHEET
 METAL MACHINERY



Quick Set Dividers



Fastest and
 most accurate on
 the market. Two sizes
 for circles up to 36" and
 48". Removable steel points,
 or pencil. No center punch.

Post Office Box 5035, Newark 5, N. J.

**... for SPECIFICATION and BUYING Informa-
 tion use your JANUARY DIRECTORY NUMBER**

Your job will be a lot easier if you'll keep the January Directory number of AMERICAN ARTISAN constantly available for handy reference. It's one of your most valuable tools — one which will save you many hours of looking up the products you need for your various jobs. It's the ONE complete, up-to-date, readily accessible source of product information on who makes the blowers, snips, controls, etc., you need — and where they're located. They're identified by trade names, too. EVERY product is listed, alphabetically arranged and printed on a distinctive yellow stock for easy reading and reference. Keep it handy ... it's a time saver.

It's CHIMNEY TOP

Time Again!

For Better Chimney
 Draft And Improved
 Stack Performance
 Use.

ACCURATE REVOLVING VENTILATORS

Sizes 3" to 36"
 Positively Prevents
 Downdraft — Storm
 And Rainproof —
 Simple in Design
 — Durable in Con-
 struction
 The Best Ventilator
 for the Lowest
 Price.



**ACCURATE SHEET METAL &
 MFG. WORKS**

2336 Milwaukee Ave. —
 CHICAGO 47, ILL.

Send for free Circumference Table

BUY

U. S. SECURITY

BONDS

NOW!

ASK YOUR WHOLESALER
for

FINEST
Pipes and Fittings



**FOR THE HEATING AND
COOLING INDUSTRY**

ARMSTRONG

**CONVENTIONAL
PERIMETER
GRAVITY**

Modern Design ★ Modern Packaging ★ Modern Distribution

ARMSTRONG FITTINGS CO.

**P. O. Box 1356
DES MOINES, IOWA**

Section of JANUARY 1956

AMERICAN ARTISAN 1956 DIRECTORY

OF

RESIDENTIAL AIR CONDITIONING, WARM AIR HEATING AND SHEET METAL PRODUCTS

Part 1.—Products Advertised In This Issue . . . Page 2d

For the names of the manufacturers of products advertised in this issue, look in Part 1, where the advertised products are classified in "directory style" with the noun governing. For the page numbers of manufacturers' advertisements published in this issue, see the last page of this yellow Directory Section.

Part 2.—All Products Classified Page 9d

If you want to know the names of one or more manufacturers making a certain product, look in Part 2, where all products are classified alphabetically in directory style with the noun governing (for instance, Forced Warm Air Furnaces are listed as Furnaces, Forced Warm Air).

Part 3.—All Trade Names Page 91d

If you have the trade name of a product and want to know who manufactures it, look in Part 3, where trade names are alphabetically listed. Trade names the same as or identifiable with the company name are not listed. Manufacturers with such trade names can be readily identified under their product classification in Parts 1 and 2.

Part 4.—All Manufacturers' Addresses Page 113d

For the complete name and address of any manufacturer, look in Part 4.

Index to Advertisers Page 132d

American Artisan
6 North Michigan Ave.
Chicago 2, Illinois

Section of
American Artisan
**1956 DIRECTORY OF RESIDENTIAL AIR CONDITIONING,
WARM AIR HEATING AND SHEET METAL PRODUCTS**

**[PART 1—Products Advertised
In This Issue]**

The products classified in this Part 1 of the Directory Section are only those actually advertised in this issue. For the complete listings of these and other products made by all manufacturers, see Part 2, starting on page 9d.

**ANGLES, ANGLE RINGS, BARS, BEAMS, CHANNELS
AND TEES**

ROLLED STEEL PRODUCTS DIV., EMERGENCY STEEL
SERVICE CO. (BARS, BEAMS, CHANNELS)

ATTENUATORS, SOUND

ANEMOSTAT CORP. OF AMERICA

BEARINGS, PILLOW BLOCK

LAU BLOWER CO.

BLOWER-FILTER UNITS, WARM AIR FURNACE

VIKING AIR PRODUCTS, DIV. NATIONAL-U. S. RADIA-
TOR CORP.

BLOWERS, DUCT

VIKING AIR PRODUCTS, DIV. NATIONAL-U. S. RADIA-
TOR CORP.

BLOWERS, EXHAUSTERS

AMERICAN AIR FILTER CO., INC., HERMAN NELSON
DIV.
BRUNDAGE CO.
PEERLESS ELECTRIC CO.
UTILITY FAN CORP., DIV. OF UTILITY APPLIANCE
CORP.

**BLOWERS, FURNACE AND AIR CONDITIONING
UNIT, CENTRIFUGAL**

AIR CONTROLS, INC.
BRUNDAGE CO.
CLARAGE FAN CO.
MORRISON PRODUCTS, INC.
LAU BLOWER CO.
PEERLESS ELECTRIC CO.
UTILITY FAN CORP., DIV. OF UTILITY APPLIANCE
CORP.
VIKING AIR PRODUCTS, DIV. NATIONAL-U. S. RADIA-
TOR CORP.

BLOWERS, MATERIAL HANDLING

AMERICAN AIR FILTER CO., INC., HERMAN NELSON
DIV.
CLARAGE FAN CO.

**BLOWERS, VENTILATING SYSTEM (CAPACITY 4000
CFM UP)**

AIR CONTROLS, INC.
AMERICAN AIR FILTER CO., INC., HERMAN NELSON
DIV.
CLARAGE FAN CO.
PEERLESS ELECTRIC CO.

BLOW PIPE ACCESSORIES

KIRK & BLUM MFG. CO.

BRUSHES, FURNACE FLUE

WORCESTER BRUSH & SCRAPER CO.

BURNER PARTS, OIL

A-P CONTROLS CORP.
CARLIN CO., THE
NU-WAY CORP., THE

BURNERS, CONVERSION, RESIDENTIAL, GAS

BANNER BURNER CO.
CENTURY ENGINEERING CORP.
DOWNING STEEL PRODUCTS CO.
HEIL CO.
HENRY FURNACE CO.
MUELLER CLIMATROL
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
SMITH CORP., A. O., PERMAGLAS DIV.
TEMCO, INC.

**BURNERS, CONVERSION, RESIDENTIAL, OIL, HIGH
PRESSURE**

BECKETT CORP., R. W.
CARLIN CO., THE
CENTURY ENGINEERING CORP.
FOREST CITY FOUNDRIES CO., NIAGARA FURNACE DIV.
HEIL CO.
MUELLER CLIMATROL
NU-WAY CORP., THE
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
SUNDSTRAND ENGINEERING CO.
SUN-RAY BURNER MFG. CORP.

CAPS AND TOPS, CHIMNEY

ACCURATE SHEET METAL & MFG. WORKS
VAN-PACKER CORP.
WALKER MFG. & SALES CORP.

CHIMNEYS, PREFABRICATED

GENERAL PRODUCTS CO.
MAJESTIC CO., INC.
VAN-PACKER CORP.

CLEANERS, VACUUM, FURNACE

NATIONAL SUPER SERVICE CO., INC.

**For the page on which you will find the advertising of manufacturers in this issue,
see the Index to Advertisers on the last page of this yellow Directory Section**

Products Advertised in This Issue

COILS, COOLING

AEROFIN CORP.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
CARRIER CORP.
HALL-NEAL FURNACE CO.
HENRY FURNACE CO.
JETTRONAIRE, INC.
OLSEN MFG. CO. THE C. A.
ROUND OAK CO., INC.
SMITH CORP., A. O. PERMAGLAS DIV.
TYPHOON AIR CONDITIONING CO., DIV. OF HUPP
CORP.
WILLIAMSON CO., THE

COILS, HEATING

AEROFIN CORP.

COLLECTORS, BLOW PIPE

AMERICAN AIR FILTER CO., INC.
KIRK & BLUM MFG. CO.

COMPRESSORS, REFRIGERATING

TECUMSEH PRODUCTS CO.

CONDENSING UNITS, REFRIGERATING

AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
COPELAND REFRIGERATION CORP.
CURTIS MFG. CO., REFRIGERATION DIV.
HALL-NEAL FURNACE CO.
HENRY FURNACE CO.
JETTRONAIRE, INC.
OLSEN MFG. CO. THE C. A.
ROUND OAK CO., INC.
SMITH CORP., A. O. PERMAGLAS DIV.
TYPHOON AIR CONDITIONING CO., DIV. OF HUPP
CORP.
WILLIAMSON CO., THE
WORTHINGTON CORP.

CONNECTIONS, DUCT, FLEXIBLE

DURO-DYNE CORP.
WILSON, INC., GRANT

CONTROLS, AIR CONDITIONING

GENERAL CONTROLS CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.
PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, COMBINATION FAN AND LIMIT

MINNEAPOLIS-HONEYWELL REGULATOR CO.
PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, FAN

PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, FUEL OIL, GRAVITY FLOW

A-P CONTROLS CORP.

CONTROLS, HEATING

MINNEAPOLIS-HONEYWELL REGULATOR CO.
PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, LIMIT

PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, MOTOR, DUCT DAMPER

CRISE CONTROLS DIV., ACRO MFG. CO.

CONTROLS, PILOTS, GAS BURNER

MINNEAPOLIS-HONEYWELL REGULATOR CO.

CONTROLS, REFRIGERATION

PENN CONTROLS, INC.
WHITE-RODGERS ELECTRIC CO.

CONTROLS, THERMOSTATS

CAM-STAT INC.
CARRIER CORP.
CRISE CONTROLS DIV., ACRO MFG. CO.
DETROIT CONTROLS CORP.
GENERAL CONTROLS CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.

CONTROL SYSTEMS, COMPLETE ASSEMBLY

GENERAL CONTROLS CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.

CONTROL SYSTEMS, ZONE, COMPLETE ASSEMBLY

CRISE CONTROLS DIV., ACRO MFG. CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.

DAMPERS, DIFFUSER

AIR CONTROL PRODUCTS, INC.
LIMA REGISTER CO.
UNIVERSAL DIFFUSER CORP.

DAMPERS, DRAFT, BAROMETRIC

BOSTON MACHINE WORKS CO.
FIELD CONTROL DIV., H. D. CONKEY & CO.
WALKER MFG. & SALES CORP.
WINDMASTER CORP.

DAMPERS, WARM AIR PIPE

DURO-DYNE CORP.
MALCO PRODUCTS

DIES, PUNCH PRESS

WHITNEY MFG. CO., W. A.

DIFFUSERS, AIR, BASEBOARD

A & A REGISTER CO.
AIR CONTROL PRODUCTS, INC.
AUER REGISTER CO.
BRANDES CO.
CHARG-LE MFG. CO.
GERWIN INDUSTRIES, THERMO-BASE DIV.
HART & COOLEY MFG. CO.
JETTRONAIRE, INC.
STANDARD STAMPING & PERFORATING CO.
STEEL CITY FURNACE CO.
TITUS MFG. CORP.
UNITED STATES REGISTER CO.
VECTAIRE MFG. CO.

DIFFUSERS, AIR, CEILING

AIR CONTROL PRODUCTS, INC.
ANEMOSTAT CORP. OF AMERICA
BARBER-COLMAN CO.
HART & COOLEY MFG. CO.
INDEPENDENT REGISTER CO.
LIMA REGISTER CO.
UNITED STATES REGISTER CO.
UNIVERSAL DIFFUSER CORP.

DIFFUSERS, AIR, FLOOR

AIR CONTROL PRODUCTS, INC.
AUER REGISTER CO.
CHARG-LE MFG. CO.
HART & COOLEY MFG. CO.
UNITED STATES REGISTER CO.

DIFFUSERS, AIR, HIGH PRESSURE

ANEMOSTAT CORP. OF AMERICA
BARBER-COLMAN CO.

DIFFUSERS, AIR, WALL

AIR CONTROL PRODUCTS, INC.

For the page on which you will find the advertising of manufacturers in this issue, see the Index to Advertisers on the last page of this yellow Directory Section

Products Advertised in This Issue

CHAR-GALE MFG. CO.
GENTLE-FLO CO.
HART & COOLEY MFG. CO.
UNITED STATES REGISTER CO.

DRAFT BOOSTERS, MECHANICAL

QUICKDRAFT CO.

DRAFT DIVERTERS, GAS HEATER

EXCELSIOR STEEL FURNACE CO.

DRILLS, ELECTRIC AND PNEUMATIC

WODACK ELECTRIC TOOL CO.

DUCT ACCESSORIES

ADELTA MFG. CO.
AJAX FURNACE FITTING CO., DIV. CINCINNATI SHEET
METAL & ROOFING CO.
ARMSTRONG FITTINGS CO.
CHAMPION FURNACE PIPE CO.
CHAR-GALE MFG. CO.
EXCELSIOR STEEL FURNACE CO.
HENRY FURNACE CO.
MAXWELL STEEL CO.
MEYER & BRO. CO., F.
ROUND OAK CO., INC.
STANDARD FURNACE SUPPLY CO., LTD.
SUPERIOR METAL FABRICATING CO.
VECTAIRE MFG. CO.
WILLIAMSON CO., THE

DUCT, FLEXIBLE

FLEXAUST CO., THE
WIREMOLD CO.

DUCT, PREFABRICATED, METAL

ADELTA MFG. CO.
AJAX FURNACE FITTING CO., DIV. CINCINNATI SHEET
METAL & ROOFING CO.
ARMSTRONG FITTINGS CO.
CHAMPION FURNACE PIPE CO.
CHAR-GALE MFG. CO.
EXCELSIOR STEEL FURNACE CO.
HENRY FURNACE CO.
MAXWELL STEEL CO.
MEYER & BRO. CO., F.
ROUND OAK CO., INC.
STANDARD FURNACE SUPPLY CO., LTD.
SUPERIOR METAL FABRICATING CO.
THOR METAL PRODUCTS CO., INC.
VECTAIRE MFG. CO.
WILLIAMSON CO., THE

FACES, RETURN AIR

AIR CONTROL PRODUCTS, INC.
GENERAL REGISTER CO.
INDEPENDENT REGISTER CO.
STEWART MFG. CO.

FANS, PROPELLER TYPE, EXHAUSTERS

AMERICAN AIR FILTER CO., INC., HERMAN NELSON
DIV.
CLARAGE FAN CO.
PEERLESS ELECTRIC CO.

FANS, PROPELLER TYPE, FURNACE

PEERLESS ELECTRIC CO.

FANS, PROPELLER TYPE, KITCHEN EXHAUST

LAU BLOWER CO.

FANS, PROPELLER TYPE, NIGHT COOLING

LAU BLOWER CO.
PEERLESS ELECTRIC CO.

FANS, PROPELLER TYPE, VENTILATING SYSTEM

CLARAGE FAN CO.
PEERLESS ELECTRIC CO.

FASTENINGS, INSULATION

STIC-KLIP MFG. CO., INC.

FASTENINGS, SHEET METAL

HEXDALL CO., A. M.

FILTERS, AIR, CLEANABLE

AMERICAN AIR FILTER CO., INC.
CAREY ELECTRONIC ENGINEERING CO., METAL WOOL
DIV.
CONTINENTAL AIR FILTERS, INC.

FILTERS, AIR, GREASE, FOR RANGE HOODS

CONTINENTAL AIR FILTERS, INC.

FILTERS, AIR, THROWAWAY

AMERICAN AIR FILTER CO., INC.

FILTERS, FUEL OIL

PUROLATOR PRODUCTS, INC.

FLASHINGS

AMERICAN BRASS CO.
HUSSEY & CO., C. G.
REVERE COPPER AND BRASS, INC.

FLUX FOR ALL SOLDERS

ALLEN CO., INC., L. B.

FRAMES, CHIMNEY CAP

LEVOW, DAVID

FURNACES

ARMSTRONG FURNACE CO. (GENERAL)
GENERAL ELECTRIC CO., AIR CONDITIONING DIV.
(GENERAL)
THATCHER FURNACE CO. (GENERAL)

FURNACES, FORCED WARM AIR

(WITH CLOTHES DRYER SECTION)
BETTCHER MFG. CORP., HERBSTER PRODUCTS DIV.

FURNACES, FORCED WARM AIR, COUNTERFLOW

ADVANCE FURNACE CO.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
CARRIER CORP.
CENTURY ENGINEERING CORP.
FOREST CITY FOUNDRIES CO., NIAGARA FURNACE DIV.
HALL-NEAL FURNACE CO.
HENRY FURNACE CO.
INGERSOLL CONDITIONED AIR DIV., BORG-WARNER
CORP.
INTERNATIONAL HEATER CO.
JETTRONAIR, INC.
LENNOX INDUSTRIES, INC.
LINCOLN FURNACE CO., INC.
MAJESTIC CO., INC.
MORRISON STEEL PRODUCTS, INC.
OLSEN MFG. CO., THE C. A.
MUELLER CLIMATROL
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS
CO.
ROUND OAK CO., INC.
SEQUOIA MFG. CO.
SMITH CORP., A. O., PERMAGLAS DIV.
SOUTHWEST MFG. CO.
SYNCHROMATIC CORP.
TEMCO, INC.
THERMO-PRODUCTS, INC.
WATERMAN-WATERBURY CO.
ZINK CO., JOHN
WILLIAMSON CO., THE

For the page on which you will find the advertising of manufacturers in this issue,
see the Index to Advertisers on the last page of this yellow Directory Section

Products Advertised in This Issue

FURNACES, FORCED WARM AIR, HIGHBOY

ADVANCE FURNACE CO.
AIRTEMP DIV., CHRYSLER CORP.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
BETTCHEE MFG. CORP., HERBSTER PRODUCTS DIV.
CARRIER CORP.
CENTURY ENGINEERING CORP.
FOREST CITY FOUNDRIES CO., NIAGARA FURNACE DIV.
HALL-NEAL FURNACE CO.
HEIL CO.
HENRY FURNACE CO.
INTERNATIONAL HEATER CO.
LENNOX INDUSTRIES, INC.
LINCOLN FURNACE CO., INC.
MAJESTIC CO., INC.
JETTRONNAIRE, INC.
MORRISON STEEL PRODUCTS, INC.
OLSEN MFG. CO., THE C. A.
MUELLER CLIMATROL
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS CO.
ROUND OAK CO., INC.
SMITH CORP., A. O., PERMAGLAS DIV.
STEEL CITY FURNACE CO.
SEQUOIA MFG. CO.
SYNCHROMATIC CORP.
TEMCO, INC.
THERMO-PRODUCTS, INC.
WATERMAN-WATERBURY CO.
WILLIAMSON CO., THE
ZINK CO., JOHN

FURNACES, FORCED WARM AIR, HORIZONTAL

ADVANCE FURNACE CO.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
CARRIER CORP.
CENTURY ENGINEERING CORP.
HALL-NEAL FURNACE CO.
HENRY FURNACE CO.
INTERNATIONAL HEATER CO.
LENNOX INDUSTRIES, INC.
LINCOLN FURNACE CO., INC.
MAJESTIC CO., INC.
MORRISON STEEL PRODUCTS, INC.
MUELLER CLIMATROL
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS CO.
ROUND OAK CO., INC.
SMITH CORP., A. O., PERMAGLAS DIV.
TEMCO, INC.
THERMO-PRODUCTS, INC.
SEQUOIA MFG. CO.
WATERMAN-WATERBURY CO.
WILLIAMSON CO., THE
ZINK CO., JOHN

FURNACES, FORCED WARM AIR, LOWBOY

AIRTEMP DIV., CHRYSLER CORP.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
BETTCHEE MFG. CORP., HERBSTER PRODUCTS DIV.
CARRIER CORP.
CENTURY ENGINEERING CORP.
FOREST CITY FOUNDRIES CO., NIAGARA FURNACE DIV.
HALL-NEAL FURNACE CO.
HEIL CO.
HENRY FURNACE CO.
INTERNATIONAL HEATER CO.
JETTRONNAIRE, INC.
LENNOX INDUSTRIES, INC.
LINCOLN FURNACE CO., INC.
MAJESTIC CO., INC.
MORRISON STEEL PRODUCTS, INC.
MUELLER CLIMATROL
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS CO.
ROUND OAK CO., INC.
SEQUOIA MFG. CO.
SMITH CORP., A. O., PERMAGLAS DIV.
STEEL CITY FURNACE CO.
SYNCHROMATIC CORP.
TEMCO, INC.
THERMO-PRODUCTS, INC.
WATERMAN-WATERBURY CO.
WILLIAMSON CO., THE

FURNACES, FORCED WARM AIR, 300,000 BTU AND OVER

SYNCHROMATIC CORP.

FURNACES, SOLDERING

INSTO-GAS CORP.

FURNACES, WARM AIR, GRAVITY

CENTURY ENGINEERING CORP.
HENRY FURNACE CO.
LENNOX INDUSTRIES, INC.
MORRISON STEEL PRODUCTS, INC.
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS CO.
ROUND OAK CO., INC.
TEMCO, INC.
WATERMAN-WATERBURY CO.
WILLIAMSON CO., THE

FURNACES, WARM AIR, GRAVITY, FLOOR

ADVANCE FURNACE CO.
QUIET AUTOMATIC BURNER CORP.
SOUTHWEST MFG. CO.
TEMCO, INC.

FURNACES, WARM AIR, GRAVITY, WALL

ADVANCE FURNACE CO.
MORRISON STEEL PRODUCTS, INC.
TEMCO, INC.

GAGES, TANK, FUEL OIL

KRUEGER SENTRY GAUGE CO.

GATES, BLAST

KIRK & BLUM MFG. CO.

GRILLES, HEATING, VENTILATING AND AIR CONDITIONING

AIR CONTROL PRODUCTS, INC.
CHAR-GALE MFG. CO.
GENERAL REGISTER CO.
HART & COOLEY MFG. CO.
INDEPENDENT REGISTER CO.
JUNIPER ELBOW CO., INC.
STEWART MFG. CO.
TITUS MFG. CORP.
UNITED STATES REGISTER CO.

GRILLES, RETURN AIR

TITUS MFG. CORP.

GUARDS, SNOW

LEVOW, DAVID

GUTTER ACCESSORIES

BERGER BROS. CO.
CHAR-GALE MFG. CO.
CINCINNATI ELBOW CO.
INLAND STEEL PRODUCTS CO.
GALVAN MFG. CO.
LEVOW, DAVID
OBDYKE, INC., BENJAMIN P.
THOR METAL PRODUCTS CO., INC.

GUTTERS

AMERICAN BRASS CO.
BERGER BROS. CO.
CHAR-GALE MFG. CO.
INLAND STEEL PRODUCTS CO.
OBDYKE, INC., BENJAMIN P.
THOR METAL PRODUCTS CO., INC.

HAMMERS, POWER

BURGESS THOMAS CO.
WODACK ELECTRIC TOOL CO.

For the page on which you will find the advertising of manufacturers in this issue, see the Index to Advertisers on the last page of this yellow Directory Section

Products Advertised in This Issue

HARDWARE, CABINET AND CASING

NATIONAL LOCK CO. (Door handles, catches and knobs)

HARDWARE, DUCT FITTING

DURO-DYNE CORP.

HEATERS, UNIT

DELTA HEATING CORP.
GENERAL GAS LIGHT CO.
HENRY FURNACE CO.
MUELLER CLIMATROL
NESBITT, INC., JOHN J.
OLSEN MFG. CO., THE C. A.

HOUSINGS, BLOWER AND FAN

LAU BLOWER CO.
UTILITY FAN CORP., DIV. OF UTILITY APPLIANCE CORP.

HUMIDIFIERS, FURNACE

AUTOMATIC HUMIDIFIER CO.
CHAR-GALE MFG. CO.
CLEVELAND HUMIDIFIER CO.
GENERAL FILTERS, INC.
MAID-O-MIST, INC.
RESEARCH PRODUCTS CORP.
SKUTTLE MFG. CO.
Viking Air Products, Div. National-U. S. Radiator Corp.
WALTON LABORATORIES, INC.

HUMIDIFIERS, PORTABLE

RESEARCH PRODUCTS CORP.

INCINERATORS

HENRY FURNACE CO.
MUELLER CLIMATROL
OLSEN MFG. CO., THE C. A.

INSULATION, BUILDING

L. O. F. GLASS FIBERS CO.

INSULATION, DUCT

GUSTIN-BACON MFG. CO.
L. O. F. GLASS FIBERS CO.

LIFTS, SKYLIGHT

LEVOW, DAVID

LININGS, CHIMNEY

EXCELSIOR STEEL FURNACE CO.

LOUVERS AND SHUTTERS, AUTOMATICALLY OR MANUALLY CONTROLLED

DURO-DYNE CORP.
ELGO SHUTTER & MFG. CO.
SWARTWOUT CO.

LOUVERS, STATIONARY

ELGO SHUTTER & MFG. CO.
SWARTWOUT CO.

MACHINERY EQUIPMENT DISTRIBUTORS

CENTRAL WEST MACHINERY CO.

MACHINES, SHEET METAL WORKING, BAR FOLDING

PECK, STOW & WILCOX CO.
SMITH, R. E.

MACHINES, SHEET METAL WORKING, BEADING

FALLSINGTON MFG. CO.
NIAGARA MACHINE AND TOOL WORKS
PECK, STOW & WILCOX CO.

MACHINES, SHEET METAL WORKING, BRAKES

DREIS & KRUMP MFG. CO.
FALLSINGTON MFG. CO.
SMITH, R. E.

MACHINES, SHEET METAL WORKING, BRAKES, PORTABLE

DREIS & KRUMP MFG. CO.
VYKE MFG. CO.

MACHINES, SHEET METAL WORKING, BURRING

NIAGARA MACHINE & TOOL WORKS

MACHINES, SHEET METAL WORKING, CLEAT BENDING

SMITH, R. E.

MACHINES, SHEET METAL WORKING, CRIMPING

FALLSINGTON MFG. CO.
NIAGARA MACHINE & TOOL WORKS
PECK, STOW & WILCOX CO.

MACHINES, SHEET METAL WORKING, DOUBLE SEAMING, ROOF

LOCKFORMER CO.

MACHINES, SHEET METAL WORKING, ELBOW

NIAGARA MACHINE & TOOL WORKS

MACHINES, SHEET METAL WORKING, FLANGING

ENGEL SHEET METAL EQUIPMENT, INC.
LOCKFORMER CO.
NIAGARA MACHINE & TOOL WORKS
SMITH, R. E.

MACHINES, SHEET METAL WORKING, GROOVING

PECK, STOW & WILCOX CO.

MACHINES, SHEET METAL WORKING, LOCK FORMING

LOCKFORMER CO.

MACHINES, SHEET METAL WORKING, NOTCHING

ENGEL SHEET METAL EQUIPMENT, INC.
FALLSINGTON MFG. CO.
THOR TOOL & DIE CO.

MACHINES, SHEET METAL WORKING, PITTSBURGH LOCK FORMING

LOCKFORMER CO.

MACHINES, SHEET METAL WORKING, PRESSES AND DIES

FALLSINGTON MFG. CO.

For the page on which you will find the advertising of manufacturers in this issue, see the index to Advertisers on the last page of this yellow Directory Section

Products Advertised in This Issue

MACHINES, SHEET METAL WORKING, SHEARS, ELECTRIC, PORTABLE

STANLEY ELECTRIC TOOLS DIV., THE STANLEY WORKS

MACHINES, SHEET METAL WORKING, SHEARS, ROTARY, SLITTING

MARSHALLTOWN MFG. CO.

MACHINES, SHEET METAL WORKING, SHEARS, SQUARING

CINCINNATI SHAPER CO.
ENGEL SHEET METAL EQUIPMENT, INC.
PECK, STOW & WILCOX CO.

MACHINES, SHEET METAL WORKING, SLIP ROLL FORMING

FALLSINGTON MFG. CO.
PECK, STOW & WILCOX CO.

MACHINES, SHEET METAL WORKING, SLITTING

BEVERLY SHEAR MFG. CO., THE
LOCKFORMER CO.
NIAGARA MACHINE & TOOL WORKS
WHITNEY MFG. CO., W. A.

MACHINES, SHEET METAL WORKING, WIRING

NIAGARA MACHINE & TOOL WORKS

METALS, PERFORATED, SHEET AND PLATE

DIAMOND MFG. CO.

MOTORS, ELECTRIC

CENTURY ELECTRIC CO.

MOULDING AND TRIM

MILLER & DOING

NAILS

PARKER-KALON DIV., GENERAL AMERICAN TRANSPORTATION CO.

PARTS, REPAIR, FURNACE AND STOVE

ADAMS CO., THE
BRAUER SUPPLY CO., A. G.
LIVINGSTON, INC.
METZNER STOVE AND FURNACE SUPPLY CO.

PIPE AND FITTINGS, CONDUCTOR

BERGER BROS. CO.
CHAR-GALE MFG. CO.
CINCINNATI ELBOW CO.
GALVAN MFG. CO.
INLAND STEEL PRODUCTS CO.
OBDYKE, INC., BENJAMIN P.
THOR METAL PRODUCTS CO., INC.

PIPE AND FITTINGS, FURNACE

ADELTA MFG. CO.
AJAX FURNACE FITTING CO., DIV. CINCINNATI
SHEET METAL & ROOFING CO.
ARMSTRONG FITTINGS CO.
CHAMPION FURNACE PIPE CO.
CHAR-GALE MFG. CO.
EXCELSIOR STEEL FURNACE CO.
FAMOUS FURNACE CO.
HENRY FURNACE CO.
JETTRONAIR, INC.
JUNIPER ELBOW CO., INC.
MAXWELL STEEL CO.
MEYER & BRO. CO., F.
ROUND OAK CO., INC.
STANDARD FURNACE SUPPLY CO., INC.

SUPERIOR METAL FABRICATING CO.
VECTAIRE MFG. CO.
WILLIAMSON CO., THE

PLATES, METAL

ROLLED STEEL PRODUCTS DIV., EMERGENCY STEEL SERVICE CORP.

PULLEYS

LAU BLOWER CO.
REPLACEMENT PARTS, INC.
ZATKO METAL PRODUCTS CO.

PUMPS, FUEL, OIL BURNER

SUNDSTRAND HYDRAULIC DIV.

PUNCHES

DURO-DYNE CORP.
REINER & CAMPBELL CO., INC.
THOR TOOL & DIE CO.
WHITNEY MFG. CO., W. A.
WHITNEY METAL TOOL CO.

REGISTERS, HEATING, VENTILATING AND AIR CONDITIONING

AIR CONTROL PRODUCTS, INC.
CHAR-GALE MFG. CO.
GENERAL REGISTER CO.
HART & COOLEY MFG. CO.
INDEPENDENT REGISTER CO.
JUNIPER ELBOW CO., INC.
STEWART MFG. CO.
TITUS MFG. CORP.
UNITED STATES REGISTER CO.
VECTAIRE MFG. CO.

REGULATORS, DUCT DAMPER SETS

DURO-DYNE CORP.
GERETT CORP., M. A.

ROOFING, SHEET METAL

AMERICAN BRASS CO.

SHEARS, THROATLESS

BEVERLY SHEAR MFG. CO., THE

SHEETS, METAL, ALUMINUM

CHAR-GALE MFG. CO.
KAISER ALUMINUM & CHEMICAL CORP.

SHEETS, METAL, COPPER

AMERICAN BRASS CO.
REVERE COPPER AND BRASS, INC.

SHEETS, METAL, STEEL, COPPER BEARING, GALVANIZED

INLAND STEEL PRODUCTS CO.

SHEETS, METAL, STEEL, CORRUGATED

GREAT WESTERN STEEL CO.

SHEETS, METAL, STEEL, GALVANIZED

BETHLEHEM STEEL CO.
CHAR-GALE MFG. CO.
GREAT WESTERN STEEL CO.
INLAND STEEL PRODUCTS CO.
ROLLED STEEL PRODUCTS DIV., EMERGENCY STEEL SERVICE CO.
UNITED STATES STEEL CORP.
WEIRTON STEEL CO.

SHEETS, METAL, STEEL, GALVANNEALED

GREAT WESTERN STEEL CO.

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Products Advertised in This Issue

SHEETS, METAL, STEEL, STAINLESS

RYERSON & SON, INC., JOSEPH T.
WASHINGTON STEEL CORP.

SHEETS, METAL, STEEL, TERNE PLATE

GREAT WESTERN STEEL CO.

SKYLIGHTS

WILLIS STEEL CORP.

SNIPS AND SHEARS, BENCH AND HAND

BEVERLY SHEAR MFG. CO., THE
CRESCENT TOOL CO.

SOLDER, ALUMINUM

ALLEN CO., INC., L. B.

SOLDER, LEAD-TIN

ALLEN CO., INC., L. B.

SOLDER, SILVER

ALLEN CO., INC., L. B.

SOLDER, ZINC

ALLEN CO., INC., L. B.

STAMPINGS

MILLER & DOING

SYSTEMS, HEATING, SMALL PIPE

CHAR-GALE MFG. CO.
JETTRONAIR, INC.

TOOLS, ROOFERS'

FREY & CO., FRANK P.
LEVOW, DAVID

TOOLS, SHEET METAL WORKERS'

CRESCENT TOOL CO. (Scratch awls, pliers, wrenches, hack
saws, screw driver)
DURO-DYNE CORP. (Clamp)
INDEPENDENT BLADE CO. (Saw blades)
JOHNSON LADDER SHOE CO. (Rubber ladder shoes)
LEVOW, DAVID (Drill saw attachment, seamer, crimper, scratch
awl, pipe and duct holder set, folding tool and saw gun blades)
MALCO PRODUCTS (Notcher, punch, seamer, crimper, scratch
PECK, STOW & WILCOX CO. (Seamer tongs, hammers, awls,
groovers, dividers, ferrule formers, stakes)
REINER & CAMPBELL CO., INC. (Dividers, drive cleats,
notchers)
WHITNEY MFG. CO., W. A. (Tinner's hammer)
WHITNEY METAL TOOL CO. (Hand crimper)

TORCHES, SOLDERING AND BRAZING

INSTO-GAS CORP.

TOWERS, COOLING

CURTIS MFG. CO., REFRIGERATION DIV.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RES- IDENTIAL

AIRTEMP DIV., CHRYSLER CORP.
AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
ARMSTRONG FURNACE CO.
CARRIER CORP.
CENTURY ENGINEERING CORP.
CURTIS MFG. CO., REFRIGERATION DIV.
GENERAL ELECTRIC CO., AIR CONDITIONING DIV.

HALL-NEAL FURNACE CO.
HENRY FURNACE CO.
INGERSOLL CONDITIONED AIR DIV., BORG-WARNER
CORP.
INTERNATIONAL HEATER CO.
JETTRONAIR, INC.
LENNOX INDUSTRIES, INC.
LINCOLN FURNACE CO., INC.
MAJESTIC CO., INC.
MORRISON STEEL PRODUCTS, INC.
MUELLER CLIMATROL
OLSEN MFG. CO., THE C. A.
PATTEN CO., J. V.
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
RHEEM MFG. CO.
RICHMOND RADIATOR CO., AFFIL. REYNOLDS METALS
CO.
ROUND OAK CO., INC.
SMITH CORP., A. O., PERMAGLAS DIV.
SUTTON CORP., O. A.
THATCHER FURNACE CO.
TYPHOON AIR CONDITIONING CO., DIV. OF HUPP
CORP.
UNITED STATES AIR CONDITIONING CORP.
WATERMAN-WATERBURY CO.
WORTHINGTON CORP.

UNITS, AIR CONDITIONING, EVAPORATIVE TYPE

ALTON MFG. CO.
NATIONAL ENGINEERING & MFG. CO.
PALMER MFG. CORP.

UNITS, AIR CONDITIONING, STORE TYPE

AMERICAN RADIATOR & STANDARD SANITARY CORP.,
AIR CONDITIONING DIV.
MUELLER CLIMATROL
PERFECTION INDUSTRIES, DIV. OF HUPP CORP.
UNITED STATES AIR CONDITIONING CORP.

VALVES, GAS, AUTOMATIC SHUT OFF

MILWAUKEE GAS SPECIALTY CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.

VALVES, GAS, SAFETY PILOT

MILWAUKEE GAS SPECIALTY CO.
MINNEAPOLIS-HONEYWELL REGULATOR CO.

VALVES, SOLENOID

MINNEAPOLIS-HONEYWELL REGULATOR CO.

VANES, DUCT TURNING

DURO-DYNE CORP.

VENTILATORS, ROOF, FAN

SWARTWOUT CO.

VENTILATORS, ROOF, GRAVITY

EMPIRE VENTILATION EQUIPMENT CO.
SWARTWOUT CO.

WASHERS, AIR, HEATING AND VENTILATING

CLARAGE FAN CO.

WELDERS

DURO-DYNE CORP.

WHEELS, BLOWER

LAU BLOWER CO.
UTILITY FAN CORP., DIV. OF UTILITY APPLIANCE
CORP.

WHOLESALEERS, HEATING EQUIPMENT

BRAUER SUPPLY CO., A. G.
FAMOUS FURNACE CO.
WATERBURY HEATING SUPPLY CO.

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Section of
American Artisan
1956 DIRECTORY OF WARM AIR HEATING, RESIDENTIAL
AIR CONDITIONING AND SHEET METAL PRODUCTS
[Part 2 — ALL PRODUCTS CLASSIFIED]

ABSORBERS, SOUND

Industrial Sound Control, Inc., Hartford, Conn.
 L. O. F. Glass Fibers Co., Toledo, O.

ADHESIVES, BONDING

Rubber and Asbestos Corp., Bloomfield, N. J.

ADHESIVES, INSULATION

Minnesota Mining & Mfg. Co., Adhesives & Coatings Div.,
 Detroit, Mich.
 Armstrong Cork Co., Lancaster, Pa.
 Miracle Adhesives Corp., New York, N. Y.
 West Chester Chemical Co., West Chester, Pa.

ADSORBERS, ODOR

Abbeon Supply Co., Jamaica, N. Y.
 Barnebey-Cheney Co., Pur Air Div., Columbus, O.
 Carbide & Carbon Chemicals Co., Div. Union Carbide & Carbon
 Corp., New York, N. Y.
 Connor Engineering Corp., Danbury, Conn.
 Manning Co., Charles E., Pittsburgh, Pa.
 Radex Corp., Chicago, Ill.
 Research Products Corp., Madison, Wis.

AIR CONDITIONING UNITS

See Units, Air Conditioning

AIR DIFFUSERS

See Diffusers, Air

AIR FILTERS

See Filters, Air

AIR FRESHENING COMPOUNDS

See Compounds, Air Freshening

AIR METERS

See Meters, Air; Anemometers

AIR, PURIFICATION

See Adsorbers, Odor

AIR STERILIZERS

See Sterilizers, Air

AIR TUBES, OIL BURNER

See Burner Parts, Oil

AIR WASHERS

See Washers, Air

ALARMS, HEATING PLANT FAILURE

Custom Mfg. Co., Chicago, Ill.

ALUMINUM COATED SHEETS

See Sheets, Metal, Steel, Aluminum Coated

ALUMINUM PIPE

See Tubing, Aluminum

ALUMINUM SHEETS

See Sheets, Metal, Aluminum

ANALYZERS, CO₂, PORTABLE

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
 Defender Instrument & Regulator Co., St. Louis, Mo.
 Dwyer Mfg. Co., F. W., Michigan City, Ind.

Ellison Draft Gage Co., Chicago, Ill.
 Engelhard, Inc., Chas., East Newark, N. J.
 General Scientific Equipment Co., Philadelphia, Pa.
 Hays Corp., Michigan City, Ind.
 Permutit Co., New York, N. Y.
 Preferred Utilities Mfg. Corp., New York, N. Y.
 Thermco Laboratories, Michigan City, Ind.
 Uehling Instrument Co., Paterson, N. J.
 Victory Engineering Corp., Union, N. J.

ANCHORS, DUCT AND PIPE

Southern Mist Products Co., Evanston, Ill.

ANEMOMETERS

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
 Detroit Air Conditioning Service Co., Detroit, Mich.
 Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
 Hastings Instrument Co., Inc., Hampton, Va.
 Hill & Co., E. Vernon, Lake Geneva, Wis.
 Illinois Testing Laboratories, Inc., Chicago, Ill. (Thermo-electric)
 Taylor Instrument Companies, Rochester, N. Y.
 Willson Products, Inc., Reading, Pa.

ANGLE IRON BENDING MACHINES

See Machines, Sheet Metal Working, Angle Iron Bending

**ANGLES, ANGLE RINGS, BARS, BEAMS,
 CHANNELS AND TEES**

Acme Steel Co., Chicago, Ill.
 Allegheny Ludlum Steel Corp., Pittsburgh, Pa.
 Aluminum Co., of America, Pittsburgh, Pa.
 American Brass Co., Waterbury, Conn.
 Bethlehem Steel Co., Bethlehem, Pa.
 Byers Co., A. M., Pittsburgh, Pa.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Chicago Metal Mfg. Co., Chicago, Ill.
 Dahlstrom Metallic Door Co., Jamestown, N. Y.
 Dow Chemical Co., Midland, Mich.
 Harvey Machine Co., Inc., Torrance, Calif.
 Inland Steel Co., Chicago, Ill.
 Inland Steel Products Co., Milwaukee, Wis.
 International Steel Co., Evansville, Ind.
 Jones & Laughlin Steel Corp., Pittsburgh, Pa.
 Kirk & Blum Mfg. Co., Cincinnati, O.
 Laclede Steel Co., St. Louis, Mo.
 National Metal Fabricators, Chicago, Ill.
 Penn Metal Co., Inc., New York, N. Y.
 Republic Steel Corp., Cleveland, Ohio.
 Revere Copper & Brass Inc., New York, N. Y.
 Reynolds Metals Co., Louisville, Ky.
 Rolled Steel Products Div., Emergency Steel Service Corp., Skokie,
 Ill.
 Tennessee Coal & Iron Div., U.S. Steel Corp., Fairfield, Ala.
 Truscon Steel Div., Republic Steel Corp., Youngstown, Ohio.
 United States Steel Corp., Pittsburgh, Pa.
 Youngstown Sheet & Tube Co., Youngstown, Ohio

ARC WELDERS

See Welders, Arc

ARC WELDING ELECTRODES

See Rods, Welding

ASBESTOS BOARD

See Sheets, Non-Metallic

ASBESTOS PAPER

See Paper, Asbestos

ATTIC FANS

See Fans, Night Air Cooling

AUTOMATIC HUMIDIFIERS

See Humidifiers, Furnace

AWNINGS, SHEET METAL

Air Control Products, Inc., Coopersville, Mich.
Air-O-Blind Metal Awning Co., Inc., Phoenix, Ariz.
Alumatic Corp. of America, Milwaukee, Wis.
Chamberlin Co. of America, Detroit, Mich.
Cramer Mfg. Co., Canton, O.
KoolVent Metal Awning Corp. of America, Pittsburgh, Pa.
Mapes Industries, Inc., Lincoln, Nebr.
Martin Stamping & Stove Co., Huntsville, Ala.
Russell Co., F. C., Cleveland, Ohio.
Sundrella Mfg. Co., Phoenix, Ariz.
Wagner Awning & Mfg. Co., Cleveland, Ohio.

BAFFLES, COMBUSTION CHAMBER

Amerform Corp., Philadelphia, Pa.
Barclay, Inc., Robt., Chicago, Ill.
Boston Machine Works Co., Lynn, Mass.
Coogan Co., Inc., Frank J., Pittsburgh, Pa.
Fieser Co., F. J., New York, N. Y.
Fulton Steelcraft Co., Swanton, O.
Harvey, Inc., Sid, Valley Stream, N. Y.
Insulating Castable Corp., River Rouge, Mich.
Insulation & Refractories Co., Williamson, N. Y.
Iron-Hide Sales Co., Matawan, N. J.
Oil Equipment Mfg. Co., New Haven, Conn.
Quigley Co., Inc., New York, N. Y.
Refractory & Insulation Corp., New York, N. Y.
Robinson Insulation Co., Great Falls, Mont.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Stark & Co., H. W., Ann Arbor, Mich.
Zeh Co., Inc., Passaic, N. J.

BAGS, DUST RECOVERY

Day Co., Minneapolis, Minn.
Master-Craft Supply Co., Inc., Haverstraw, N. Y.
Raybestos-Manhattan, Inc., Manheim, Pa.
Wagner Awning & Mfg. Co., Cleveland, Ohio.

BALANCING EQUIPMENT, FAN

Bear Mfg. Co., Rock Island, Ill.
Gisholt Machine Co., Madison, Wis.
Sundstrand Hydraulic Div., Rockford, Ill.

BAND SAWS

See Machines, Saws, Band

BAR FOLDERS

See Machines, Bar Folding

BAROMETRIC DRAFT DAMPERS

See Dampers, Draft, Barometric; Draft Diverters

BARRIERS, VAPOR

For Crawl Spaces

Angier Corp., Framingham, Mass.
Bird & Son, Inc., East Walpole, Mass.
Meadows, Inc., W. R., Elgin, Ill.
Richkraft Co., The, Chicago, Ill.

BARs

See Angles, Bars, Beams, Channels, and Tees

BASE BOARD REGISTERS

See Diffusers, Air, Baseboard

BASES AND PADS, VIBRATION ISOLATING

Alexander Brothers Belting Co., Philadelphia, Pa.
Barry Corp., Watertown, Mass.
Buffalo Forge Co., Buffalo, N. Y.
Celotex Corp., Chicago, Ill.
Clarage Fan Co., Kalamazoo, Mich.
Division Lead Co., Chicago, Ill.
Felters Co., Inc., Boston, Mass.
Firestone Industries Products Co., Akron, O.
General Tire & Rubber Co., Industrial Products Div., Wabash, Ind.
Goodrich Co., B. F., Akron, Ohio.
Goodrich Co., B. F., Sponge Products Div., Shelton, Conn.
Hobsite Products Co., Inc., Harrison, N. J.
Johns-Manville, New York, N. Y.

Korfund Co., Inc., Long Island City, N. Y.

L. O. F. Glass Fibers Co., Toledo, O.

Lord Mfg. Co., Erie, Pa.

MB Mfg. Co., Div. of Tectron American, Inc., New Haven, Conn.

Mundet Cork Corp., Brooklyn, N. Y.

National Cork Co., Englewood, N. J.

National Lead Co., New York, N. Y.

New York Belting & Packing Co., Passaic, N. J.

Raybestos-Manhattan, Inc., Passaic, N. J.

Robinson Aviation, Inc., Teterboro, N. J.

United Cork Cos., Kearny, N. J.

United States Rubber Co., New York, N. Y.

Vibration Eliminator Co., Long Island City, N. Y.

Vibration Mountings, Inc., Elmhurst, N. Y.

Wagner Awning & Mfg. Co., Cleveland, Ohio.

Western Felt Works, Chicago, Ill.

BATHS, TINNING

Division Lead Co., Summit, Ill.

Eclipse Fuel Engineering Co., Rockford, Ill.

Farrelloy Co., Philadelphia, Pa.

BEADERS

See Machines, Beading

BEAMS

See Angles, Bars, Beams, Channels, and Tees

BEARINGS, PILLOW BLOCK

Ahlberg Bearing Co., Chicago, Ill.
Air Controls, Inc., Cleveland, Ohio.
Anti-Friction Bearings Co., Los Angeles, Calif.
Chain Belt Co., Milwaukee, Wis.
Chicago Die Casting Mfg. Co., Chicago, Ill.
Congress Drives Div., Tann Corp., Detroit, Mich.
Dodge Mfg. Corp., Mishawaka, Ind.
Fafnir Bearing Co., The, New Britain, Conn.
Freed Products Co., Moline, Ill.
Goldens' Foundry & Machine Co., Columbus, Ga.
Jones Machinery Div., Hewitt-Robins Inc., Chicago, Ill.
Lau Blower Co., Dayton, Ohio.
Link-Belt Co., Chicago, Ill.
Norma-Hoffmann Bearing Corp., Stamford, Conn.
Plymouth Industries, Inc., Plymouth, Ind.
Randall Graphite Bearings, Inc., Chicago, Ill.
Rorysford Foundry & Machine Co., Rorysford, Pa.
Seco-Lite Mfg. Co., St. Louis, Mo.
Shafer Bearing Div., Chain Belt Co., Downers Grove, Ill.
SKF Industries, Inc., Philadelphia, Pa.
Stephens-Adamson Mfg. Co., Aurora, Ill.
Triangle Mfg. Co., Oshkosh, Wis.
Vernco Corp., Columbus, Ind.
Whiteley Bearing Corp., Chicago, Ill.
Wood's Sons Co., T. B., Chambersburg, Pa.

BELTS, V

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
American Pulley Co., Philadelphia, Pa.
Browning Mfg. Co., Inc., Maysville, Ky.
Chicago Belting Div., Chicago-Allis Mfg. Corp., Chicago, Ill.
Congress Drives Div., Tann Corp., Detroit, Mich.
Dayton Rubber Co., Dayton, Ohio.
DoALL Co., Des Plaines, Ill.
Dodge Mfg. Corp., Mishawaka, Ind.
Firestone Industrial Products Co., Akron, O.
Gates Rubber Co., Denver, Colo.
Goodrich Co., B. F., Akron, Ohio.
Goodyear Tire & Rubber Co., Inc., Akron, Ohio.
Jones Machinery Div., Hewitt-Robins Inc., Chicago, Ill.
Lovejoy Flexible Coupling Co., Chicago, Ill.
Manheim Mfg. & Belting Co., Manheim, Pa.
Maurey Mfg. Corp., Chicago, Ill.
New York Belting & Packing Co., Passaic, N. J.
Pyott Foundry & Machine Co., Chicago, Ill.
Raybestos-Manhattan, Inc., Passaic, N. J.
Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio.
Thermoid Co., Trenton, N. J.
United States Rubber Co., New York, N. Y.
Wood's Sons Co., T. B., Chambersburg, Pa.
Worthington Corp., Harrison, N. J.

BENDERS, (ANGLE, ETC.)

See Machines, Benders

BLADES, PROPELLER FAN

Ackermann Mfg. Co., Wheeling, W. Va.

Aerovent Fan Co., Piqua, Ohio.
 Air Controls, Inc., Cleveland, Ohio.
 Airmaster Corp., Chicago, Ill.
 American Coolair Corp., Jacksonville, Fla.
 Beckett & Co., Thomas, Dallas, Texas.
 Bern's Mfg. Co., Chicago, Ill.
 Brookside Products Co., Inc., McCordsville, Ind.
 Burden Co., Alan E., Los Angeles, Calif.
 C & H Air Conditioning Fan Co., Inc., Atlanta, Ga.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Irvington, N. J.
 Chicago Blower Corp., Franklin Park, Ill.
 Dallas Engineering Co., Inc., Dallas, Texas.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 Dayton Rubber Co., Dayton, O.
 Dual-Air Fan Co., Hampshire, Ill.
 Dynamic Air Engineering, Inc., Los Angeles, Calif.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 International Engineering, Inc., Dayton, Ohio.
 Kloppenborg Aluminum Foundry, Davenport, Iowa.
 Lakewood Engineering & Mfg. Co., Chicago, Ill.
 Martin Fan & Blower Co., Chicago, Ill.
 Meier Electric & Machine Co., Indianapolis, Ind.
 Myers Electric Co., Pittsburgh, Pa.
 National Gas Equipment Co., Inc., Terrell, Texas.
 Revcor, Carpentersville, Ill.
 Peerless Electric Co., Warren, Ohio.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 South Bend Air Products, Inc., South Bend, Ind.
 Skinner Heating & Ventilating Co., Inc., St. Louis, Mo.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Thermal Industries, Indio, Calif.
 Torrington Mfg. Co., Torrington, Conn.
 Vernco Corp., Columbus, Ind.
 Wind-Way Fan & Ventilator Co., New Orleans, La.

BLAST GATES

See Gates, Blast

BLOWER CONTROLS

See Controls, Blower, Speed Changing

BLOWER-FILTER UNITS, WARM AIR FURNACE

Filter and fan only

Adelta Mfg. Co., Philadelphia, Pa.
 Advance Furnace Co., Wichita, Kans.
 Air Conditioning Equipment Co., Minneapolis, Minn.
 Air Controls, Inc., Cleveland, Ohio.
 Airwasher Corp., Eaton Rapids, Mich.
 Aladdin Heating Corp., San Leandro, Calif.
 American Foundry & Furnace Co., Bloomington, Ill.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Auburn Burner Co., Auburn, Ind.
 Bard Mfg. Co., Bryan, Ohio.
 Bovee Furnace Works, Waterloo, Iowa.
 Brundage Co., Kalamazoo, Mich.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Campbell Heating Co., Des Moines, Iowa.
 Corbman Bros., Inc., Philadelphia, Pa.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 Delta Heating Corp., Trenton, N. J.
 Firewel Co., Inc., Buffalo, N. Y.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
 Furblo Co., Hermansville, Mich.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hastings Air Conditioning Co., Hastings, Nebr.
 Heating Assurance, Inc., Spokane, Wash.
 Henry Furnace Co., Medina, Ohio.
 International Heater Co., Utica, N. Y.
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif.
 Jackson & Church Co., Saginaw, Mich.
 Lau Blower Co., Dayton, Ohio.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Made-Rite Co., Inc., Newport, Ky.
 MaGul Foundry & Furnace Co., Bloomington, Ill.
 Majestic Co., Inc., Huntington, Ind.
 Martin Fan & Blower Co., Chicago, Ill.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 Mever Furnace Co., Peoria, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Norman Products Co., Inc., Columbus, O.

Olsen Mfg. Co., C. A., Elyria, Ohio.
 Peerless Electric Co., Warren, Ohio.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Pennsylvania Furnace & Iron Co., Warren, Pa.
 Premier Furnace Co., Dowagiac, Mich.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Sandberg Mfg. Co., Portland, Ore.
 Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Western Blower Co., Seattle, Wash.
 Williamson Co., The, Cincinnati, Ohio.
 Zick Sheet Metal Works, Dearborn, Mich.

BLOWER-FILTER UNITS, WARM AIR FURNACE

Equipped with humidifier and/or germicidal apparatus

BLOWER HOUSINGS

See Housings, Blower and Fan

BLOWER-WASHER UNITS, WARM AIR FURNACE

Air Stream Filter Corp., St. Louis, Mo.
 Airwasher Corp., Eaton Rapids, Mich.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.

BLOWER WHEELS

See Wheels, Blower

BLOWERS, DUCT, CENTRIFUGAL

Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.

BLOWERS, EXHAUSTERS

Airfan Engineering Co., Los Angeles, Calif.
 Aladdin Heating Corp., San Leandro, Calif.
 Ammerman Co., C. L., Minneapolis, Minn.
 Babbins, Inc., New York, N. Y.
 Barry Blower Co., Minneapolis, Minn.
 Bayley Blower Co., Milwaukee, Wis.
 Billmyre Blower Div., Lamson Corp., Syracuse, N. Y.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brundage Co., Kalamazoo, Mich.
 Buffalo Forge Co., N. Y.
 Carolina Blower Co., Inc., Greensboro, N.C.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N.J.
 Chicago Blower Corp., Franklin Park, Ill.
 Clarage Fan Co., Kalamazoo, Mich.
 Cook Co., Loren, Berea, O.
 Day Co., Minneapolis, Minn.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 Hig Electric Ventilating Co., Chicago, Ill.
 Industrial Plastic Fabricators, Inc., Norwood, Mass.
 Martin Fan & Blower Co., Chicago, Ill.
 Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
 New York Blower Co., Chicago, Ill.
 Northern Blower Co., Cleveland, Ohio.
 Peerless Electric Co., Warren, O.
 Phelps Mfg. Co., Little Rock, Ark.
 Power Engineering Co., Chicago, Ill.
 Puhl & Hepper Mfg. Co., Inc., St. Louis, Mo.
 Redmond Distributors, Inc., Owosso, Mich.
 Rees Blow Pipe Mfg. Co., Berkeley, Calif.
 S & C Mfg. Co., Cincinnati, O.
 Skinner Htg. & Vent. Co., St. Louis, Mo.
 Spencer Turbine Co., Hartford, Conn.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
 Wing Mfg. Co., L. J., Linden, N. J.
 Woolley Engineering Co., Detroit, Mich.

BLOWERS, FORCED DRAFT, ASH PIT

Aladdin Heating Corp., San Leandro, Calif.
 American Blower Corp., Detroit, Mich.
 Babbins, Inc., New York, N. Y.
 Bayley Blower Co., Milwaukee, Wis.
 Buffalo Forge Co., Buffalo, N. Y.
 Champion Blower & Forge Co., Lancaster, Pa.
 Clarage Fan Co., Kalamazoo, Mich.

Coppus Engineering Corp., Worcester, Mass.
 Pasco Industries, Inc., Rochester, N. Y.
 Gallaher Co., Omaha, Nebr.
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 General Blower Co., Inc., Philadelphia, Pa.
 International Engineering, Inc., Dayton, Ohio.
 Joy Mfg. Co., Pittsburgh, Pa.
 Lehigh Fan & Blower Co., Allentown, Pa.
 Martin Fan & Blower Co., Chicago, Ill.
 Power Engineering Co., Chicago, Ill.
 Robinson Ventilating Co., Zelenople, Pa.
 Small Motors, Inc., Chicago, Ill.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wing Mfg. Co., L. J., Linden, N.J.

BLOWERS, FURNACE AND AIR CONDITIONING UNIT, CENTRIFUGAL

Air Conditioning Equipment Co., Minneapolis, Minn.
 Air Controls, Inc., Cleveland, Ohio.
 Airfan Engineering Co., Los Angeles, Calif.
 Airwasher Corp., Eaton Rapids, Mich.
 Aladdin Heating Corp., San Leandro, Calif.
 American Blower Corp., Detroit, Mich.
 American Foundry & Furnace Co., Bloomington, Ill.
 American Furnace Co., St. Louis, Mo.
 Auburn Burner Co., Auburn, Ind.
 Barry Blower Co., Minneapolis, Minn.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brundage Co., Kalamazoo, Mich.
 Buffalo Forge Co., Buffalo, N. Y.
 Campbell Heating Co., Des Moines, Iowa.
 Century Fan & Ventilator Co., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chicago Blower Corp., Franklin Park, Ill.
 Clarage Fan Co., Kalamazoo, Mich.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Eclipse Fuel Engineering Co., Rockford, Ill.
 Freed Products Co., Moline, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 Furblo Co., Hermansville, Mich.
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 International Sales Co., San Francisco, Calif.
 Lau Blower Co., Dayton, Ohio.
 Lennox Industries, Inc., Marshalltown, Iowa.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Majestic Co., Inc., Huntington, Ind.
 Martin Fan & Blower Co., Chicago, Ill.
 Mauer Engineering, Evanston, Ill.
 Meyer Furnace Co., Peoria, Ill.
 Morrison Products, Inc., Cleveland, Ohio.
 Mountain States Equipment Co., Denver, Colo.
 Peerless Electric Co., Warren, Ohio.
 Premier Furnace Co., Dowagiac, Mich.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 Skinner Heating & Ventilating Co., Inc., St. Louis, Mo.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Standard Heating Equipment Co., Waterloo, Iowa.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Western Blower Co., Seattle, Wash.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Zick Sheet Metal Works, Dearborn, Mich.

BLOWERS, INDUCED DRAFT, SMOKE PIPE

Aladdin Heating Corp., San Leandro, Calif.
 American Blower Corp., Detroit, Mich.
 American Foundry & Furnace Co., Bloomington, Ill.
 Ammerman Co., C. L., Minneapolis, Minn.
 Autogas Co., Bellwood, Ill.
 Babbins, Inc., New York, N. Y.
 Bayley Blower Co., Milwaukee, Wis.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Chicago Blower Corp., Franklin Park, Ill.
 DeBothezat Fans Div. American Machine & Metals, Inc., Moline, Ill.
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.

Kisco Boiler & Engineering Co., St. Louis, Mo.
 Lehigh Fan & Blower Co., Allentown, Pa.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Martin Fan & Blower Co., Chicago, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
 Power Engineering Co., Chicago, Ill.
 Preferred Utilities Mfg. Corp., New York, N. Y.
 Quickdraft Co., Canton, O.
 Small Motors, Inc., Chicago, Ill.
 Therm Oil Burner Co., Seattle, Wash.
 Tjernlund Mfg. Co., St. Paul, Minn.
 Viking Mfg. Corp., Cleveland, Ohio.
 Whitty Co., Inc., Boston, Mass.
 Wing Mfg. Co., L. J., Linden, N.J.

BLOWERS, VENTILATING SYSTEM (CAPACITY 4000 CFM UP)

Aerovent Fan Co., Inc., Piqua, O.
 Air Controls, Inc., Cleveland, Ohio.
 Airfan Engineering Co., Los Angeles, Calif.
 Aladdin Heating Corp., San Leandro, Calif.
 American Blower Corp., Detroit, Mich.
 American Foundry & Furnace Co., Bloomington, Ill.
 Ammerman Co., C. L., Minneapolis, Minn.
 Arex Co., Chicago, Ill.
 Babbins, Inc., New York, N. Y.
 Barry Blower Co., Minneapolis, Minn.
 Bayley Blower Co., Milwaukee, Wis.
 Berns Mfg. Co., Chicago, Ill.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 Campbell Heating Co., Des Moines, Iowa.
 Campbell Co., E. K., Kansas City, Mo.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chicago Blower Corp., Franklin Park, Ill.
 Clarage Fan Co., Kalamazoo, Mich.
 Commercialaire, Inc., Brooklyn, N. Y.
 Coppus Engineering Corp., Worcester, Mass.
 Day Co., Minneapolis, Minn.
 DeBothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 Furblo Co., Hermansville, Mich.
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 General Blower Co., Inc., Philadelphia, Pa.
 Hartzell Propeller Fan Co., Div. Castle Hills Corp., Piqua, Ohio.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Ilg Electric Ventilating Co., Chicago, Ill.
 International Engineering, Inc., Dayton, Ohio.
 Joy Mfg. Co., Pittsburgh, Pa.
 King Co., Owatonna, Minn.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Marlo Coil Co., St. Louis, Mo.
 Martin Fan & Blower Co., Chicago, Ill.
 Moore Co., Marceline, Mo.
 Mountain States Equipment Co., Denver, Colo.
 National Engineering & Mfg. Co., Sedalia, Mo.
 Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
 Newcomb-Detroit Co., Detroit, Mich.
 New York Blower Co., Chicago, Ill.
 Niagara Blower Co., New York, N. Y.
 Peerless Electric Co., Warren, Ohio.
 Phelps Mfg. Co., Little Rock, Ark.
 Power Engineering Co., Chicago, Ill.
 Robinson Ventilating Co., Zelenople, Pa.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 Skinner Heating & Vent Co., Heater Div. of St. Louis Blow Pipe & Heater Co., St. Louis, Mo.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Trane Co., LaCrosse, Wis.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Western Blower Co., Seattle, Wash.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wing Mfg. Co., L. J., Linden, N.J.

BLOWING MACHINES, INSULATION

Babbins, Inc., New York, N. Y.
 Insulating Equipment Co., Chicago, Ill.
 Molloy Machine Corp., Chicago, Ill.
 Rotary Compressor Blower Co., Grove City, Pa.
 Superior Mfg. Co., Inc., Alexandria, Ind.
 Universal Insulating Co., Van Wert, O.

BLOW PIPE ACCESSORIES

Elbows, Flanges, Hangers, Hoods and Sweeps, Joints, Rings, Tubing

Barcafer Mfg. Co., Salina, Kans.
Carolina Blower Co., Inc., Greensboro, N. C.
Chicago Metal Mfg. Co., Chicago, Ill.
Day Co., Minneapolis, Minn.
Goethel Sheet Metal Works, Inc., Alfred, Milwaukee, Wis.
Kindt-Collins Co., Cleveland, Ohio.
Kirk & Blum Mfg. Co., Cincinnati, Ohio. (Adjustable blurring hoods).
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Lyman Co., H. B., Southampton, Mass.
Newcomb-Detroit Co., Detroit, Mich.
Northern Blower Co., Cleveland, Ohio.
Penn Supply & Metal Corp., Philadelphia, Pa.
Puhl & Hepper Mfg. Co., Inc., St. Louis, Mo.
Skinner Heating & Ventilating Co., St. Louis, Mo.
Spincraft, Inc., Milwaukee, Wis.
Western Blower Co., Seattle, Wash.
Winkler & Sons, Inc., A. E., Milwaukee, Wis.
Young & Bertke Co., Cincinnati, Ohio.

BLOW PIPE COLLECTORS

See Collectors, Blow Pipe

BLOW PIPE EQUIPMENT

See Accessories, Blow Pipe; Gates, Blast; Collectors, Blow Pipe

BOARDS, PANEL AND CONTROL

For Winter, Summer and Year 'Round Air Conditioning Systems
Detroit Controls Corp., Detroit, Mich.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.

BODIES AND ACCESSORIES, TRUCK

Allegheny Body Co., Inc., Philadelphia, Pa. (Utility body)
Anthony Co., Streator, Ill.
Boyetown Auto Body Works, Inc., Boyertown, Pa.
Herman Body Co., St. Louis, Mo.
Holan Corp., J. H., Cleveland, O.
International Harvester Co., Motor Truck Div., Chicago, Ill.
Karyall Body, Inc., Cleveland, O.
McCabe Powers Auto Body Co., St. Louis, Mo.
Morrison Steel Products, Inc., Buffalo, N. Y.
Stahl Metal Products, Cleveland, O.

BOLTS, EXPANSION

Arro Expansion Bolt Co., Marion, O.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Expansion Bolt Co., Chicago, Ill.
Fee & Mason Mfg. Co., Inc., Manassquan, N. J.
Harper Co., H. M., Morton Grove, Ill.
Industrial Screw Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Paine Co., Addison, Ill.
Phillips Drill Co., Michigan City, Ind.
Polis Mfg. Co., J. D., Chicago, Ill.
Rawlplug Co., Inc., New York, N. Y.
Republic Steel Corp., Cleveland, O.
Star Expansion Bolt Co., New York, N. Y.
U. S. Expansion Bolt Co., York, Pa.

BOLTS, TOGGLE AND ANCHOR

Arro Expansion Bolt Co., Marion, O.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Expansion Bolt Co., Chicago, Ill.
Fee & Mason Mfg. Co., Inc., Manassquan, N. J.
Gries Reproducer Co., New Rochelle, N. Y.
Harper Co., H. M., Morton Grove, Ill.
Huck Mfg. Co., Detroit, Mich.
Industrial Screw Co., Chicago, Ill.
Paine Co., Addison, Ill.
Polis Mfg. Co., J. D., Chicago, Ill.
Rawlplug Co., Inc., New York, N. Y.
Republic Steel Corp., Cleveland, O.
Star Expansion Bolt Co., New York, N. Y.
U. S. Expansion Bolt Co., York, Pa.

BOMBS, SMOKE

Hill & Co., E. Vernon, Lake Geneva, Wis.
Kilgore, Inc., Westerville, Ohio.
Unexcelled Chemical Corp., New York, N. Y.

BOOSTER FANS

See Fans, Booster

BOOSTERS, DRAFT, MECHANICAL

For Increasing Chimney Capacity

Ammerman Co., C. L., Minneapolis, Minn.
Breeze Burners, Santa Fe, N. M.
Brumme Mfg. Co., Bloomington, Ill.
Little Burner Co., Inc., H. C., San Rafael, Calif.
National Fuel Conservation Co., Inc., White Plains, N. Y.
Mueller Climatrol, Milwaukee, Wis.
Quickdraft Co., Canton, O.
Tjernlund Mfg. Co., St. Paul, Minn.

BRAKES

See Machines, Brakes

BRUSHES, ACID

Allen Co., Inc., L. B., Chicago, Ill.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Johnson Mfg. Co., Inc., Mount Vernon, Ia.
Lukens Metal Co., Thos. F., Philadelphia, Pa.
Milwaukee Brush Mfg. Co., Milwaukee, Wis.
Osborn Mfg. Co., Cleveland, Ohio.
Schaefer Brush Mfg. Co., Milwaukee, Wis.

BRUSHES, FURNACE, FLUE

Harvey, Inc., Sid, Valley Stream, N. Y.
Milwaukee Brush Mfg. Co., Milwaukee, Wis.
Osborn Mfg. Co., Cleveland, Ohio.
Pillely Brush Co., Fort Madison, Ia.
Schaefer Brush Mfg. Co., Milwaukee, Wis.
Worcester Brush & Scraper Co., Div. Mason Worcester Co., Worcester, Mass.

BUFFERS, GRINDERS, POLISHERS, AND SANDERS, ELECTRIC

Albertson & Co., Inc., Sioux City, Iowa.
Baldor Electric Co., St. Louis, Mo.
Black & Decker Mfg. Co., Towson, Md.
Brown-Brockmeyer Co., Inc., Dayton, Ohio.
Chicago Pneumatic Tool Co., New York, N. Y.
Delta Power Tool Div., Rockwell Mfg. Co., Pittsburgh, Pa.
DeSoto Oil Burner Corp., York, Pa.
Detroit Surfacing Machine Co., Detroit, Mich.
H & H Research Co., Detroit, Mich.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Haskins Co., R. G., Chicago, Ill.
Jefferson Machine Tool Co., Cincinnati, Ohio.
L'Hommedieu & Sons Co., Chas. F., Chicago, Ill.
Mall Tool Co., Chicago, Ill.
Millers Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis.
Portable Electric Tools, Inc., Chicago, Ill.
Porter-Cable Machine Co., Syracuse, N. Y.
Reynolds Electric Co., River Grove, Ill.
Rotor Tool Co., Cleveland, Ohio.
Skil Corporation, Chicago, Ill.
Small Motors, Inc., Chicago, Ill.
Snap-on Tools Corp., Kenosha, Wis.
Speedway Mfg. Co., Div. of Thor Power Tool Co., Chicago, Ill.
Stanley Electric Tool Div., Stanley Works, New Britain, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Thor Power Tool Co., Aurora, Ill.
U. S. Electrical Motors, Inc., Los Angeles, Calif.
Valley Electric Co., St. Louis, Mo.
Wyzenbeek & Staff, Inc., Chicago, Ill.

BUFFERS, GRINDERS, POLISHERS, AND SANDERS, PNEUMATIC

Chicago Pneumatic Tool Co., New York, N. Y.
Ideal Commutator Dresser Co., Sycamore, Ill.
Keller Tool Div., Gardner-Denver Co., Grand Haven, Mich.
Rotor Tool Co., Cleveland, Ohio.
Skil Corporation, Chicago, Ill.
Sundstrand Hydraulic Div., Rockford, Ill.
Thor Power Tool Co., Aurora, Ill.

BURNER PARTS, OIL

A-P Controls Corp., Milwaukee, Wis. (Oil lifters, flow control valves)
Airflame, Waukegan, Ill. (Combustion head)
Auburn Spark Plug Co., Inc., Auburn, N. Y. (Electrodes)
Bell Engineering & Supply Co., Three Rivers, Mich. (Flexible oil lines)
Burnrite Valve Mfg. Corp., Mt. Vernon, N. Y.
Crown Eng. Corp., Keyport, N. J. (Electrodes)

Delavan Mfg. Co., West Des Moines, Ia. (Nozzle filters)
 Dielectric Products Co., Inc., Jersey City, N. J. (Electrodes)
 Eddington Metal Specialty Co., Eddington, Pa. (Combustion heads, electrodes, air tubes)
 Electrical Components Co., Div. of National Ceramic Co., Trenton, N. J. (Electrodes)
 Fieser Co., F. J., New York, N. Y.
 Fisher Governor Co., Marshalltown, Ia. (Liquid level controls)
 Gas & Oil Industry Laboratories, Inc., Irvington, N. J. (Valves)
 Guardian Products Corp., Michigan City, Ind.
 Harvey, Inc., Sid, Valley Stream, N. Y. (Electrodes, air tubes)
 Hays Mfg. Co., Erie, Pa. (Valve fittings)
 Heetrliter Co., Newberg, Ore.
 HomEase Products Div. of Bogue Electric Mfg. Co., Paterson, N. J. (Electrodes)
 Hydrovalve Co., Brooklyn, N. Y. (Electrodes)
 Lord Mfg. Co., Erie, Pa.
 Lovejoy Flexible Coupling Co., Chicago, Ill. (Flexible shaft couplings)
 Modern Die & Machine Co., Boston, Mass. (Combustion head)
 Morse-Smith-Morse Co., The, Watertown, Mass. (Valves)
 Mueller Co., Decatur, Ill. (Valves)
 National Fuel Conservation Co., Inc., White Plains, N. Y. (Combustion head)
 Nu-Way Corp., The, Rock Island, Ill. (Nozzle and electrode assembly)
 Oilgas Generating Burners, Inc., New Castle, Pa. (Combustion head)
 Premier Furnace Co., Dowagiac, Mich.
 Quiet Automatic Burner Corp., Newark, N. J. (Combustion head)
 Siemon Mfg. Co., Grandview, Mo.
 Steinen Mfg. Co., Wm., Newark, N. J. (Electrodes)
 Webster Electric Co., Racine, Wis. (Nozzle valve)

BURNERS, CONVERSION, RESIDENTIAL, GAS

Adams Mfg. Co., Cleveland, Ohio.
 Akeley-Steele Co., Aurora, Ill.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, Ohio.
 Aston Products, Inc., Hazel Park, Mich.
 Auburn Burner Co., Auburn, Ind.
 Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
 Autogas Co., Bellwood, Ill.
 Automatic Firing Corp., St. Louis, Mo.
 Banner Burner Co., Youngstown, Ohio.
 Barber Mfg. Co., Cleveland, O.
 Bard Mfg. Co., Bryan, Ohio.
 Beck Engineering Combustion Kompany, St. Louis, Mo.
 Blue-Ray Gas Burner Co., Detroit, Mich.
 Bonair Products, Inc., Darby, Pa.
 Bowby Air Devices Co., Wichita, Kans.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Burdett Mfg. Co., Chicago, Ill.
 Century Engineering Corp., Cedar Rapids, Iowa.
 Certified Furnace Corp., Trenton, N. J.
 Columbia Burner Co., Toledo, Ohio.
 Conco Engineering Works, Mendota, Ill.
 Crane Co., Chicago, Ill.
 Custom Industries Mfg., Inc., Warren, O.
 Dalzen Tool & Mfg. Co., Detroit, Mich.
 Delco Appliance Div. General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 Denver Fire Clay Co., Denver, Colo.
 Dornback Furnace & Foundry Co., Cleveland, Ohio.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Downing Steel Products Co., Dayton, O.
 Dunn-Rite Products, Garden City, Mich.
 Eckhart Mfg. Co., Inc., Union, N. J.
 Eclipse Fuel Engineering Co., Rockford, Ill.
 F & E Mfg. Co., Centerville, Calif.
 Falz Mfg. Co., St. Paul, Minn.
 Floral City Heater Co., Monroe, Mich.
 Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
 Geisel Mfg. Inc., Elyria, Ohio.
 Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
 Gold Top Heating, Inc., Butte, Mont.
 Green Colonial Furnace Co., Des Moines, Ia.
 H-P Products, Louisville, Ohio.
 Handley-Brown Heater Co., Jackson, Mich.
 Hart & Crouse Corp., Oneida, N. Y.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Hastings Air Control, Inc., Omaha, Nebr.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, Ohio.
 Hutchinson Burner & Mfg. Co., Hutchinson, Kans.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 Iron Fireman Mfg. Co., Cleveland, Ohio.
 Jackson & Church Co., Saginaw, Mich.
 Junior Co., J. C., Kansas City, Mo.
 Ken-Joy Gas Burner Co., Milwaukee, Wis.
 Killam Gas Burner Co., Denver, Colo.
 Kleenair Furnace Co., Portland, Ore.
 Ko-Z-Aire Products, Inc., Red Oak, Iowa
 Laharco Industries, Minneapolis, Minn.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Liberty Combustion Corp., Syracuse, N. Y.
 Lundt, Inc., Ernest C., Little Falls, N. J.
 Magic Servant Products Co., Detroit, Mich.
 Majestic Co., Inc., Huntington, Ind.
 Martin Co., Inc., J. O., San Francisco, Calif.
 Martin Stamping & Stove Co., Huntsville, Ala.
 Mavflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Iowa.
 Meyer Furnace Co., Peoria, Ill.
 Mid-Continent Metal Products Co., Chicago, Ill.
 Modern Controls Corp., Centerline, Mich.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mueller Climatrol, Milwaukee, Wis.
 Multi-Therm Mfg. Co., Inc., Detroit, Mich.
 Muncie Burner Mfg. Co., Romulus, Mich.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Niagara Motors Corp., Dunkirk, N. Y.
 Norman Products Co., Inc., Columbus, Ohio.
 Olsen Mfg. Co., The C. A., Elyria, Ohio
 Paramount Supply Co., Lincoln, Nebr.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Pennsylvania Furnace & Iron Co., Warren, Pa.
 Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
 Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
 Premier Furnace Co., Dowagiac, Mich.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Radiant Burners, Inc., Lombard, Ill.
 Rapid Heat Corp., Detroit, Mich.
 Rasch Mfg. Corp., Kansas City, Mo.
 Rayfield-Staffco Burner Co., Chicago, Ill.
 Revere Products, Inc., Detroit, Mich.
 Roberts-Gordon Appliance Corp., Buffalo, N. Y.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Schwab Safe Co., Lafayette, Ind.
 Sheet Metal Mfg. Co., Youngstown, O.
 Siemon Mfg. Co., Grandview, Mo.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Sonner Burner Co., Winfield, Kans.
 Southern Iron Co., E. E., St. Louis, Mo.
 Standard Fuel Engineering Co., Detroit, Mich.
 Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Sullivan Valve & Engineering Co., Butte, Mont.
 Sunny Sue Burner Co., Syracuse, N. Y.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Surface Combustion Corp., Toledo, Ohio.
 Synchronous Flame, Inc., Walworth, Wis.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
 Thermex Engineering Co., Chicago, Ill.
 Thermo-Products, Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, Ohio
 Triad Products Corp., Chicago, Ill.
 Vacuum Gas Burner Corp., Olean, N. Y.
 Viking Mfg. Corp., Cleveland, O.
 Ward Heater Co., Los Angeles, Calif.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Will-Burt Co., Orrville, Ohio.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, Ohio.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Penn.
 Zink Co., John, Tulsa, Okla.

BURNERS, CONVERSION, RESIDENTIAL, GAS-OIL COMBINATION

Automatic Firing Corp., St. Louis, Mo.
Hutchinson Burner & Mfg. Co., Hutchinson, Kans.
Johnson Co., S. T., Philadelphia, Pa. & Oakland, Calif.
Junior Co., J. C., Kansas City, Mo.
Lundt, Inc., Ernest C., Little Falls, N. J.
Quiet Automatic Burner Corp., Newark, N. J.
Rayfield-Staffco Burner Co., Chicago, Ill.
Roberts-Gordon Appliance Corp., Buffalo, N. Y.
Siemon Mfg. Co., Grandview, Mo.
Synchronous Flame, Inc., Walworth, Wis.
Wisconsin Oil Burner Co., Madison, Wis.

BURNERS, CONVERSION, RESIDENTIAL, OIL, GRAVITY

Benner-Nawman, Inc., Oakland, Calif.
Boston Machine Works Co., Lynn, Mass.
Breese Burners, Santa Fe, N. Mex.
DeSoto Oil Burner Corp., York, Pa.
Gillmore Burners, Inc., Cleveland, O.
Heating Specialties Co., Baltimore, Md.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Junior Co., J. C., Kansas City, Mo.
Kleer-Kleen Mfg. Co., Hayward, Calif.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Kresno-Stamm Mfg. Co., Palisades Park, N. J.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Metro Metal Mfg. Co., Holt, Mich.
Meyer Furnace Co., Peoria, Ill.
Rayfield-Staffco Burner Co., Chicago, Ill.
United Air Heaters, Inc., Seattle, Wash.

BURNERS, CONVERSION, RESIDENTIAL, OIL, HIGH PRESSURE

Acme Heat & Power, Inc., Brooklyn, N. Y.
Acme Oil Burner Co., Inc., Cedar Rapids, Ia.
Airflame, Waukegan, Ill.
Aldrich Co., Wyoming, Ill.
All-Gas Equipment Co., Milwaukee, Wis.
Allied Federal Industries, Newark, N. J.
American Furnace Co., St. Louis, Mo.
American Mohawk Co., Inc., New York, N. Y.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, O.
Arrow Foundry Co., Freeport, Ill.
Aston Products, Inc., Hazel Park, Mich.
Auburn Burner Co., Auburn, Ind.
Automatic Burner Corp., Chicago, Ill.
Automatic Firing Corp., St. Louis, Mo.
Bard Mfg. Co., Bryan, O.
Beckett Corp., R. W., Elyria, O.
Bethlehem Foundry & Machine Co., Bethlehem, Pa.
Bryan Steam Corp., Peru, Ind.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Burnrite Valve Mfg. Corp., Mt. Vernon, N. Y.
Calorcoil Burner Corp., Hartford, Conn.
Carlin Co., The Wethersfield, Conn.
Cary Mfg. Co., Waupaca, Wis.
Century Engineering Corp., Cedar Rapids, Ia.
Chalmers Oil Burner Co., Minneapolis, Minn.
Conco Engineering Works, Heating Div., Mendota, Ill.
Connecticut State Furnace Co., Bridgeport, Conn.
Crane Co., Chicago, Ill.
Delco Appliance Div., General Motors Corp., Rochester, N. Y.
Delta Heating Corp., Trenton, N. J.
DeSoto Oil Burner Corp., York, Pa.
Diesel Oil Burner Corp., Jamaica, N. Y.
Dornback Furnace & Foundry Co., Cleveland, O.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
East Coast Co., Boston, Mass.
Eastern Oil & Equipment Co., Portland, Maine
Eckhart Mfg. Co., Inc., Union, N. J.
Eclipse Fuel Engineering Co., Rockford, Ill.
Electric Furnace-Man, Inc., Emmaus, Pa.
Electro-Watt, Inc., Seattle, Wash.
Electrol Burner Mfg. Co., Inc., Rutherford, N. J.
Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
General Automatic Products Corp., Baltimore, Md.
General Oil Heating Corp., West New York, N. J.
Gilbert & Barker Mfg. Co., West Springfield, Mass.
Gillen Co., J. L., Detroit, Mich.

Green Colonial Furnace Co., Des Moines, Ia.
Hall-Neal Furnace Co., Indianapolis, Ind.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Harvey, Inc., Sid, Valley Stream, N. Y.
Harvey-Whipple, Inc., Springfield, Mass.
Heit Co., Milwaukee, Wis.
Henry Furnace Co., Medina, O.
Herco Oil Burner Corp., Lancaster, Pa.
Hershey Machine & Foundry Co., Manheim, Pa.
HomEase Products Div. of Bogue Electric Mfg. Co., Paterson, N. J.
Hy-Lo Burner Co., Inc., Eddington, Pa.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
International Heater Co., Utica, N. Y.
International Oil Burner Co., St. Louis, Mo.
Iron Fireman Mfg. Co., Cleveland, O.
Jackson & Church Co., Saginaw, Mich.
Jet-Heat, Inc., Englewood, N. J.
Johnson Co., S. T., Oakland, Calif.
Keith Furnace Co., Des Moines, Ia.
Kleen-Heat, Inc., Chicago, Ill.
Kol-Master Corp., Oregon, Ill.
Ko-Z-Aire Products, Inc., Red Oak, Ia.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Kresno-Stamm Mfg. Co., Palisades Park, N. J.
Laco Oil Burner Co., Inc., Griswold, Ia.
Lennox Industries, Inc., Marshalltown, Ia.
Lincoln Furnace Co., Inc., Hawthorne, N. J.
Lynn Products Co., Lynn, Mass.
Majestic Co., Huntington, Ind.
Malleable Iron Fittings Co., Branford, Conn.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
McDonald Mfg. Co., A. Y., Dubuque, Iowa.
McPherson Furnace & Supply Co., Portland, Ore.
Metro Metal Mfg. Co., Holt, Mich.
Metromatic Mfg. Co., Medford, Mass.
Meyer Furnace Co., Peoria, Ill.
Montag Inc., Portland, Ore.
Morrison Steel Products, Inc., Buffalo, N. Y.
Mortemp Div., Mechanical Products Co., Seattle, Wash.
Mt. Hawley Mfg. Co., Peoria, Ill.
Mueller Climatrol, Milwaukee, Wis.
National Airoil Burner Co., Inc., Philadelphia, Pa.
National-U. S. Radiator Corp., Johnstown, Pa.
Northwest Foundry & Furnace Co., Portland, Ore.
Nu-Way Corp., The Rock Island, Ill.
Oil Equipment Laboratories, Inc., Elizabeth, N. J.
Olsen Mfg. Co., The C. A., Elyria, O.
Patten Co., J. V., Sycamore, Ill.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, O.
Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
Premier Furnace Co., Dowagiac, Mich.
Premium Coal & Oil Co., Cincinnati, O.
Quick Furnace & Supply Co., Des Moines, Ia.
Quiet Automatic Burner Corp., Newark, N. J.
Quiet-Heat Mfg. Corp., Subsidiary of Emerson Radio and Phonograph Corp., Newark, N. J.
Radiant Utilities Corp., Brooklyn, N. Y.
Ray Oil Burner Co., San Francisco, Calif.
Red Wing Oil Burner Co., Inc., Medford, Mass.
Reif-Rexoil, Inc., Buffalo, N. Y.
Robot Auto-Heat Corp., Middletown, Conn.
Ronci Machine Co., Inc., F., Centredale, R. I.
Roscoe Mfg. Co., Seattle, Wash.
Round Oak Co., Inc., Dowagiac, Mich.
Rybolt Heater Co., Ashland, O.
S-K Co., Inc., Camden, N. J.
Sandberg Mfg. Co., Portland, Ore.
Schwab Safe Co., Lafayette, Ind.
Sheet Metal Mfg. Co., Youngstown, O.
Silent Glow Oil Burner Co., Hartford, Conn.
Simplex Oil Heating Corp., Philadelphia, Pa.
Standard Arcoil Corp., Newark, N. J.
Steel Products Engineering Co., Combustioneer Div., Springfield, O.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Sundstrand Engineering Co., Rockford, Ill.
Sun-Ray Burner Mfg. Corp., Jamaica, N. Y.
Synchronous Flame, Inc., Walworth, Wis.
Synchromatic Corp., Watertown, Wis.
Thatcher Furnace Co., Garwood, N. J.
Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
Thermo-Products, Inc., North Judson, Ind.

Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Tru-Heat Co., Trenton, N. J.
 Twin Control Burner Mfg. Co., New York, N. Y.
 United States Cooling Tower Co., Div. Heatcraft Co., Louisville, Ky.
 Viking Mfg. Corp., Cleveland, O.
 Volcano Burner Corp., New York, N. Y.
 Waltham Oil Burner Co., Inc., Boston, Mass.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Ft. Wayne, Ind.
 Weatherall Engineers, Inc., Providence, R. I.
 Will-Burt Co., Orrville, O.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Pa.
 Yorktowne Machine Co., York, Pa.

BURNERS, CONVERSION, RESIDENTIAL, OIL, LOW PRESSURE

Automatic Burner Corp., Chicago, Ill.
 Bard Mfg. Co., Bryan, O.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Heil Co., Milwaukee, Wis.
 Herco Oil Burner Corp., Lancaster, Pa.
 Hy-Lo Burner Co., Inc., Eddington, Pa.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Kleen-Heat, Inc., Chicago, Ill.
 Majestic Co., Huntington, Ind.
 Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Nu-Way Corp., The, Rock Island, Ill.
 Radiant Utilities Corp., Brooklyn, N. Y.
 Steel Products Engineering Co., Combustioneer Div., Springfield, O.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Sundstrand Engineering Co., Rockford, Ill.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Ft. Wayne, Ind.
 Weatherall Engineers, Inc., Providence, R. I.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.

BURNERS, CONVERSION, RESIDENTIAL, OIL, ROTARY

Calorol Burner Corp., Hartford, Conn.
 Chalmers Oil Burner Co., Minneapolis, Minn.
 Diesel Oil Burner Corp., Jamaica, N. Y.
 Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
 McKee Furnace Co., Minneapolis, Minn.
 Ray Oil Burner Co., San Francisco, Calif.
 Rayfield-Staffco Burner Co., Chicago, Ill.
 Swirling Oil Burner Mfg. Corp., Jamaica, N. Y.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.

BURRING MACHINES

See Machines, Burring

CABINETS AND CASINGS

Armstrong Furnace Co., Columbus, Ohio.
 Atlas Mfg. Co., St. Paul, Minn.
 Berger Furnace Corp., Belle Vernon, Pa.
 Berger Mfg. Co., Div. of Republic Steel Corp., Canton, Ohio
 Biersach & Neidermeyer Co., Milwaukee, Wis.
 Brundage Co., Kalamazoo, Mich.
 Chicago Metal Mfg. Co., Chicago, Ill.
 Dahlstrom Metallic Door Co., Jamestown, N. Y.
 Falstrom Co., Passaic, N. J.
 Harrison Sheet Steel Co., Chicago, Ill.
 Kirk & Blum Mfg. Co., Cincinnati, Ohio.
 Moss Industries, Inc., Brooklyn, N. Y.
 Republic Steel Corp., Cleveland, O.
 Rybolt Heater Co., Ashland, O.
 St. Charles Mfg. Co., St. Charles, Ill.
 Skinner Heating & Ventilating Co., St. Louis, Mo.
 Thermo-Products, Inc., North Judson, Ind.
 Utica Products, Inc., Utica, N. Y.
 Zick Sheet Metal Works, Dearborn, Mich.

CABLE, ELECTRIC HEATING

See Panels, Heating, Electric

CALCULATORS, HEATING, AIR CONDITIONING AND SHEET METAL

Armco Steel Corp., Middletown, O.
 Armstrong Furnace Co., Columbus, O.
 Calculator Specialty Co., Chicago, Ill.
 Morton Engineering Services, Paul S., Lawrence, Mich.
 Perrygraf Corp., Maywood, Ill.

CANOPIES, PREFABRICATED

Air Control Products, Inc., Coopersville, Mich.
 Kawneer Co., Niles, Mich.
 Mapes Industries, Inc., Lincoln, Nebr.

CAPACITORS, ELECTRICAL, FOR POWER FACTOR CORRECTIONS

General Electric Co., Capacitor Dept., Hudson Falls, N. Y.
 Mallory Co., P. R., Indianapolis, Ind.
 Potter Co., North Chicago, Ill.

CAPS AND TOPS, CHIMNEY

Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
 Acme Mfg. Co., Philadelphia, Pa.
 Adams Co., Dubuque, Iowa.
 Airjet Ventilator Co., El Monte, Calif.
 Ammerman Co., C. L., Minneapolis, Minn.
 Armstrong Fittings Co., Des Moines, Ia.
 Berger Furnace Corp., Belle Vernon, Pa.
 Bieler & Sons, Inc., L., Long Island City, N. Y.
 Boston Machine Works Co., Lynn, Mass.
 Breidert Co., G. C., San Fernando, Calif.
 Coleman Co., Inc., Wichita, Kans.
 Corbman Bros., Inc., Philadelphia, Pa.
 Excelsior Steel Furnace Co., Chicago, Ill.
 Gerhardt Co., Inc., George T., Sausalito, Calif.
 Inland Steel Products Co., Milwaukee, Wis.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Majestic Co., Inc., Huntington, Ind.
 Nicework Metal Products Co., Leedsdale, Pa.
 Penn Supply & Metal Corp., Philadelphia, Pa.
 Penn Ventilator Co., Philadelphia, Pa.
 Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
 Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y.
 Sioux Steel Co., Sioux Falls, S. D.
 Southbridge Roofing Co., Inc., Southbridge, Mass.
 Standard Furnace Supply Co., Ltd., Omaha, Nebr.
 Sterling Foundry Co., Sterling, Ill.
 Tesco, Inc., Tulsa, Okla.
 Tierney Rotor Ventilator Co., Minneapolis, Minn.
 Van-Packer Corp., Bettendorf, Ia.
 Walker Mfg. & Sales Corp., St. Joseph, Mo.
 Waverly Heating Supply Co., Boston, Mass.
 Wallace Co., William, Metalbestos Div., Belmont, Calif.
 Wilder Products Co., Springfield, O.
 Wood Mfg. Co., A. R., Luverne, Minn.

CAPS, VENT

Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
 Ammerman Co., C. L., Minneapolis, Minn.
 Black Mfg. Co., Harrison, N. J.
 Champion Furnace Pipe Co., Peoria, Ill.
 Mirror Patented Stove Pipe Co., Hartford, Conn.
 Morse-Smith-Morse Co., The, Watertown, Mass.
 Ohio Foundry & Mfg. Co., Steubenville, O.
 Walker Mfg. & Sales Corp., St. Joseph, Mo.
 Wilder Products Co., Springfield, O.

CASINGS

See Cabinets and Casings

CAULKING COMPOUNDS

See Compounds, Caulking

CEILING DIFFUSERS

See Diffusers, Air, Ceiling

CEILINGS, METAL

Detroit Steel Products Co., Detroit, Mich.
 Edwards Mfg. Co., Inc., Cincinnati, Ohio.
 Hauserman Co., E. F., Cleveland, Ohio.
 Klauer Mfg. Co., Dubuque, Iowa.
 Reynolds Metals Co., Louisville, Ky.
 Speed Metals Inc., Rockford, Ill.
 Tennessee Coal, Iron & Railroad Co., Fairfield, Ala.
 Tiffin Art Metal Co., Tiffin, Ohio.

Wakefield Co., Vermillion, O.
Wheeling Corrugating Co., Wheeling, W. Va.

CEMENT, FURNACE

Acme Asbestos Covering & Flooring Co., Chicago, Ill.
Armstrong Co., Chicago, Ill.
Botfield Refractories Co., Philadelphia, Pa.
Carey Mfg. Co., Philip, Cincinnati, Ohio.
Clinton Metallic Paint Co., Clinton, N. Y.
Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Hercules Chemical Co., Inc., New York, N. Y.
Hetzel Roofing Products Co., Inc., Newark, N. J.
Johns-Manville, New York, N. Y.
Lastik Products Co., Inc., Pittsburgh, Pa.
Nebel Mfg. Co., Cleveland, Ohio.
Pecora Paint Co., Philadelphia, Pa.
Plastic Products Co., Detroit, Mich.
Preferred Utilities Mfg. Corp., New York, N. Y.
Quigley Co., Inc., New York, N. Y.
Radiator Specialty Co., Charlotte, N. C.
Refractory & Insulation Corp., New York, N. Y.
Rutland Fire Clay Co., Rutland, Vt.
S.O.S. Products Co., Inc., Brooklyn, N. Y.
Sall Mountain Co., Hamilton, Ohio.
Sauereisen Cements Co., Pittsburgh, Pa.
Smooth-on Mfg. Co., Jersey City, N. J.
Standard Asbestos Mfg. Co., Chicago, Ill.
Standard Fuel Engineering Co., Detroit, Mich.
Tamm Industries, Inc., Chicago, Ill.
United Gilsonite Laboratories, Scranton, Pa.
Wilson, Inc., Grant, Chicago, Ill.

CEMENT, INSULATING

Acme Asbestos Covering & Flooring Co., Chicago, Ill. (Asbestos, mineral wool & magnesia).
Armstrong Cork Co., Lancaster, Pa.
Asbestos Asphalt Insulation, Inc., Chicago, Ill.
Baldwin-Hill Co., Trenton, N. J. (Mineral wool)
Botfield Refractories Co., Philadelphia, Pa.
Carey Mfg. Co., Philip, Cincinnati, Ohio. (Asbestos, magnesia, rock wool)
Denver Fire Clay Co., Denver, Colo. (Vermiculite & rock wool; high temperature)
Eagle-Picher Co., Cincinnati, Ohio.
Ehret Magnesia Mfg. Co., Valley Forge, Pa. (Asbestos).
Green Fire Brick Co., A. P., Mexico, Mo. (Mineral wool)
Hetzel Roofing Products Co., Inc., Newark, N. J.
International Vermiculite Co., Girard, Ill.
Johns-Manville, New York, N. Y. (Asbestos).
Keasbey & Mattison Co., Ambler, Pa. (Asbestos).
Mundet Cork Corp., North Bergen, N. J. (Magnesia).
National Fuel Conservation Co., Inc., White Plains, N. Y.
Norristown Magnesia & Asbestos Co., Norristown, Pa. (Asbestos, rockwool & magnesia).
Ohmlac Paint & Refining Co., Chicago, Ill. (Asphalt & asbestos).
Pabco Products, Inc., San Francisco, Calif.
Preferred Utilities Mfg. Corp., New York, N. Y.
Pyrolite Products Co., Cleveland, Ohio.
Quigley Co., Inc., New York, N. Y. (Asbestos).
Ramtite Co., Div. of Obermayer Co., Chicago, Ill.
Refractory & Insulation Corp., New York, N. Y. (Castable refractory).
Rex Roto Corp., Detroit, Mich.
Robinson Insulation Co., Great Falls, Mont. (Vermiculite).
Ruberoid Co., New York, N. Y. (Asbestos).
Rutland Fire Clay Co., Rutland, Vt. (Asbestos).
Sall Mountain Co., Hamilton, Ohio. (Asbestos).
Sauereisen Cements Co., Pittsburgh, Pa.
Standard Asbestos Mfg. Co., Chicago, Ill. (Asbestos).
Standard Fuel Engineering Co., Detroit, Mich. (Rock wool & asbestos).
Thompson & Co., Oakmont, Pa. (Asbestos).
United States Mineral Wool Co., Stanhope, N. J. (Mineral wool)
Wilson, Inc., Grant, Chicago, Ill. (Asbestos).
Zonolite Co., Chicago, Ill. (Vermiculite).

CEMENT, REFRACTORY

See Refractories

CEMENT, ROOF

Acme Asbestos Covering & Flooring Co., Chicago, Ill.
Armstrong Co., Chicago, Ill.
Barrett Div. Allied Chemical & Dye Corp., New York, N. Y.
Bird & Son, Inc., East Walpole, Mass.
Blue Ridge Talc Co., Inc., Henry, Va.

Calbar Paint & Varnish Co., Philadelphia, Pa.
Carey Mfg. Co., Philip, Cincinnati, Ohio.
Carter Paint Co., Liberty, Ind.
Celotex Corp., Chicago, Ill.
Certain-teed Products Corp., Ardmore, Pa.
Clinton Metallic Paint Co., Clinton, N. Y.
Continental Products Co., Euclid, Ohio.
Coopers Creek Chemical Corp., West Conshohocken, Pa.
Flintkote Co., New York, N. Y.
Glidden Co., Cleveland, Ohio.
Hetzel Roofing Products Co., Inc., Newark, N. J.
Horn Co., Inc., A. C., Long Island City, N. Y.
Insul-Mastic Corp. of America, Summit, Ill.
Iowa Paint Mfg. Co., Inc., Des Moines, Iowa.
Iron-Hide Sales Co., Matawan, N. J.
Johns-Manville, New York, N. Y.
Koppers Co., Inc., Pittsburgh, Pa.
Lastik Products Co., Inc., Pittsburgh, Pa.
Meadows, Inc., W. R., Elgin, Ill.
Midland Paint & Varnish Co., Cleveland, Ohio.
National Mfg. Corp., Tonawanda, N. Y.
Nebel Mfg. Co., Cleveland, Ohio.
North American Mogul Products Co., Cleveland, Ohio.
Ohmlac Paint & Refining Co., Chicago, Ill.
Pecora Paint Co., Philadelphia, Pa.
Presstite Engineering Co., St. Louis, Mo.
Ruberoid Co., New York, N. Y.
Rutland Fire Clay Co., Rutland, Vt.
S.O.S. Products Co., Inc., Brooklyn, N. Y.
Sonneborn Sons, Inc., L., New York, N. Y.
Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc. Savannah, Ga.
Thompson & Co., Oakmont, Pa.
Tropical Paint Co., Cleveland, Ohio.
United Gilsonite Laboratories, Scranton, Pa.
United States Gypsum Co., Chicago, Ill.
Whitlam Mfg. Co., J. C., Wadsworth, O.

CHAIN, FURNACE

Bead Chain Mfg. Co., Bridgeport, Conn.
Hart & Cooley Mfg. Co., Holland, Mich.
McKay Co., Pittsburgh, Pa.
Republic Steel Corp., Cleveland, O.
Turner & Seymour Mfg. Co., Torrington, Conn.
United States Register Co., Battle Creek, Mich.

CHAMBERS, COMBUSTION, PREFORMED

Amerform Corp., Philadelphia, Pa.
Armstrong Cork Co., Lancaster, Pa. (Insulating refractory)
Boston Machine Works Co., Lynn, Mass. (Insulating brick)
Fulton Steelcraft Co., Swanton, O.
Gem Clay Forming Co., Sebring, O.
Green Fire Brick Co., A. P., Mexico, Mo. (Fire clay, insulating brick).
Harvey, Inc., Sid, Valley Stream, N. Y.
Hasko Utilities Co., New York, N. Y. (Refractory).
Insulating Castable Corp., River Rouge, Mich.
Insulation & Refractories Co., Williamson, N. Y. (Refractory concrete & insulating refractory).
Kolb Refractories Co., Philadelphia, Pa.
Monogram Products Co., Inc., Philadelphia, Pa. (Insulating refractory).
Mortemp Div., Mechanical Products Co., Seattle, Wash. (Chrome Steel)
National Airoil Burner Co., Inc., Philadelphia, Pa.
Oil Equipment Mfg. Co., New Haven, Conn. (Inconel).
Peterson Co., B. A., Dowagiac, Mich.
Preferred Utilities Mfg. Corp., New York, N. Y.
Refractory & Insulation Corp., New York, N. Y. (Refractory).
Rehm, R., St. Albans, N. Y. (Radiant silicons).
Rex Roto Corp., Detroit, Mich.
S.O.S. Products Co., Inc., Brooklyn, N. Y.
Sandberg Mfg. Co., Portland, Ore. (Stainless steel).
Stefco Steel Co., Michigan City, Ind.
Universal Zonolite Insulation Co., Chicago, Ill. (Vermiculite concrete).
Webber Co., A. R., New Haven, Conn. (Refractory).
Wilson, Inc., Grant, Chicago, Ill.

CHANNELS

See Angles, Bars, Beams, Channels and Tees

CHEMICALS, RUST PREVENTIVE

American Chemical Paint Co., Ambler, Pa.
Aquatrol Laboratories, Inc., Clifton, N. J.
Carbide & Carbon Chemicals Co., Div. Union Carbide & Carbon Corp., New York, N. Y.

Cristy Specialty Corp., Worcester, Mass.
 Dearborn Chemical Co., Chicago, Ill.
 Galvicon Corp., New York, N. Y.
 Industrial Service Laboratories, Milwaukee, Wis.
 Klem Chemicals, Inc., Dearborn, Mich.
 Madden Corp., The, Chicago, Ill.
 Magnus Chemical Co., Garwood, N. J.
 Metropolitan Refining Co., Inc., Long Island City, N. Y.
 Neilson Chemical Co., Detroit, Mich.
 North American Mogul Products Co., Cleveland, Ohio.
 Oakite Products, Inc., New York, N. Y.
 Okun Co., A. L., So. Ozone Park, N. Y.
 Pennsylvania Refining Co., Ohio Div., Cleveland, Ohio.
 Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
 Protective Coatings, Inc., Detroit, Mich.
 Radiator Specialty Co., Charlotte, N. C.
 S.O.S. Products Co., Inc., Brooklyn, N. Y.
 Sudbury Laboratory, South Sudbury, Mass.
 Truscon Laboratories, Detroit, Mich.
 Turco Products, Inc., Los Angeles, Calif.
 Wolfe-Kote Co., Sheboygan, Wis.

CHIMNEY CAPS

See Caps and Tops, Chimney

CHIMNEY LININGS

See Linings, Chimney

CHIMNEYS, PREFABRICATED

Chimney Sales Corp., Washington, D. C.
 Condensation Engineering Corp., Chicago, Ill.
 General Products Co., Fredericksburg, Va.
 Majestic Co., Inc., Huntington, Ind.
 Pace Maker Chimney Co., Chillicothe, Ill.
 Van-Packer Corp., Bettendorf, Ia.
 Wallace Co., William, Metalbestos Div., Belmont, Calif.

CIRCULAR SAWS

See Machines, Sheet Metal Working, Saws, Circular

CLEANERS, AIR ELECTRICAL

Air-Maze Corp., Cleveland, Ohio.
 American Air Filter Co., Inc., Louisville, Ky.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Dollinger Corp., Rochester, N. Y.
 Electro-Air Cleaner Co., Pittsburgh, Pa.
 Radex Corp., Chicago, Ill.
 Raytheon Mfg. Co., Waltham, Mass.
 Trion, Inc., McKees Rocks, Pa.
 Westinghouse Electric Corp., Sturtevant Div., Hyde Park, Boston, Mass.

CLEANERS, POLISHERS AND FINISHERS, METAL

Allen Co., Inc., L. B., Chicago, Ill. (Stainless steel & monel).
 American Chemical Paint Co., Ambler, Pa.
 Ampion Corp., Long Island City, N. Y. (All metals)
 Brulin Co., Indianapolis, Ind. (De-greasing compound)
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del. (All metals).
 Klem Chemicals, Inc., Dearborn, Mich.
 Magnus Chemical Co., Garwood, N. J.
 NuSteel Co., Chicago, Ill. (Aluminum & stainless steel).
 Oakite Products, Inc., New York, N. Y.
 Pennsylvania Salt Mfg. Co., Philadelphia, Pa. (Ferrous and non ferrous)
 Protective Coatings, Inc., Detroit, Mich.
 Standard Steel Spring Co., Gary, Ind.
 Tamms Industries Inc., Chicago, Ill.
 Truscon Laboratories, Detroit, Mich.
 Turco Products, Inc., Los Angeles, Calif.
 Western Reserve Laboratories, Cleveland, Ohio.
 Wolfe-Kote Co., Sheboygan, Wis.

CLEANERS, VACUUM, FURNACE

Ace Co., Ocala, Fla.
 Baker Furnace & Cleaner Mfg. Co., Toledo, Ohio.
 Breuer Electric Mfg. Co., Chicago, Ill.
 Chicago Blower Corp., Franklin Park, Ill.
 Doyle Vacuum Cleaner Co., Grand Rapids, Mich.
 Empire Chemical Products Co., Newark, N. J.
 General Blower Co., Morton Grove, Ill.
 Harvey, Inc., Sid, Valley Stream, N. Y.

Hasko Utilities Co., New York, N. Y.
 Ideal Industries, Inc., Sycamore, Ill.
 Kent Co., Inc., Rome, N. Y.
 Master-Craft Supply Co., Inc., Haverstraw, N. Y.
 Meyer & Sons, Inc., Skokie, Ill. (Truck mounted)
 Molloy Machine Corp., Chicago, Ill. (Truck mounted)
 National Super Service Co., Inc., Toledo, Ohio.
 Premier Co., St. Paul, Minn.
 Pullman Vacuum Cleaner Corp., Boston, Mass.
 Spencer Turbine Co., Hartford, Conn.
 Thompson & Sons, Inc., Lyons, Ill.

CLEANOUT DOORS

See Doors, Cleanout

CLEAT BENDERS

See Machines, Cleat Bending

CLEATS, DRIVE

See Connectors, Metal

CLIPS, FASTENING, ROOFING

Bard Mfg. Co., Bryan, Ohio.
 Berger Bros. Co., Philadelphia, Pa.
 Bridesburg Foundry Co., Philadelphia, Pa.
 Inland Steel Products Co., Milwaukee, Wis.
 Lexsco, Inc., Cleveland, Ohio.
 Southbridge Roofing Co., Inc., Southbridge, Mass.

CLIPS AND TIPS, DAMPER

Adams Co., Dubuque, Iowa.
 Air Control Products, Inc., Coopersville, Mich.
 Armstrong Fittings Co., Des Moines, Ia.
 Berger Bros. Co., Philadelphia, Pa.
 Gerett Corp., M. A., Milwaukee, Wis.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Howes-Woods Co., Cambridge, Mass.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Mueller Climatrol, Milwaukee, Wis.
 Severson Mfg. & Supply Co., Milwaukee, Wis.
 United States Register Co., Battle Creek, Mich.
 Young Regulator Co., Cleveland, Ohio.

CO₂ ANALYZERS

See Analyzers, CO₂

COAL BURNERS, AUTOMATIC

See Stokers

COATINGS, METAL PROTECTIVE

Allied Porcelain, Inc., Waukegan, Ill.

COILS, COOLING, DIRECT EXPANSION

Addison Products Co., Addison, Mich.
 Aerofin Corp., Syracuse, N. Y.
 Airtemp Div., Chrysler Corp., Dayton, O.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Beacon-Morris Corp., Boston, Mass.
 Berger Furnace Corp., Belle Vernon, Pa.
 Betz Corp., Hammond, Ind.
 Blissfield Mfg. Co., Blissfield, Mich.
 Bohn Aluminum & Brass Corp., Detroit, Mich.
 Brucker, Inc., M., Chicago, Ill.
 Bush Mfg. Co., West Hartford, Conn.
 Carrier Corp., Syracuse, N. Y.
 Century Engineering Corp., Cedar Rapids, Ia.
 Clime-Matic Corp., South Norwalk, Conn.
 Conditionaire Unit Co., Chicago, Ill.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Frigidaire Div., General Motors Corp., Dayton, Ohio.
 Governair Corp., Oklahoma City, Okla.
 Great Northern Mfg. Co., Chicago, Ill.
 Hastings Air Control, Inc., Omaha, Nebr.
 Henry Furnace Co., Medina, O.
 International Mfg. Co., Oklahoma City, Okla.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Kennard Corp., St. Louis, Mo.
 Kirsch Co., Refrigeration Div., Sturgis, Mich.
 Kramer Trenton Co., Trenton, N. J.
 Larkin Coils, Inc., Atlanta, Ga.
 Lennox Industries, Inc., Marshalltown, Ia.

McCord Corp., Detroit, Mich.
 McQuay, Inc., Minneapolis, Minn.
 Majestic Co., Inc., Huntington, Ind.
 Marlo Coil Co., St. Louis, Mo.
 Mitchell & Co., Inc., W. K., Philadelphia, Pa.
 Modine Mfg. Co., Racine, Wis.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Niagara Blower Co., New York, N. Y.
 Olsen Mfg. Co., The, C. A., Elyria, O.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless of America, Inc., Chicago, Ill.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Perfex Corp., Milwaukee, Wis.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Refrigeration Engineering, Inc., Los Angeles, Calif.
 Rempe Co., Chicago, Ill.
 Rigidbilt, Inc., Chicago, Ill.
 Rinehart, Inc., Richmond, Ind.
 Roessing Mfg. Co., Sharpsburg Sta., Pittsburgh, Pa.
 Rome-Turney Radiator Co., Rome, N. Y.
 Rybolt Heater Co., Ashland, O.
 Shana Mfg., Inc., Chicago, Ill.
 Super Radiator Corp., Minneapolis, Minn.
 Sutton Corp., O. A., Wichita, Kans.
 Tenney Engineering, Inc., Union, N. J.
 Thatcher Furnace Co., Garwood, N. J.
 Trane Co., The, La Crosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Viking Mfg. Corp., Cleveland, O.
 Vilter Mfg. Co., Milwaukee, Wis.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Williamson Co., The, Cincinnati, O.
 Witt Co., A. H., Los Angeles, Calif.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

COILS, COOLING, WATER

Aerofin Corp., Syracuse, N. Y.
 Beacon-Morris Corp., Boston, Mass.
 Bush Mfg. Co., West Hartford, Conn.
 Carrier Corp., Syracuse, N. Y.
 Conditionaire Unit Co., Chicago, Ill.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 G & O Mfg. Co., New Haven, Conn.
 Governair Corp., Oklahoma City, Okla.
 Hastings Air Control, Inc., Omaha, Nebr.
 Henry Furnace Co., Medina, O.
 International Mfg. Co., Oklahoma City, Okla.
 Kennard Corp., St. Louis, Mo.
 Kramer Trenton Co., Trenton, N. J.
 Larkin Coils, Inc., Atlanta, Ga.
 McCord Corp., Detroit, Mich.
 McQuay, Inc., Minneapolis, Minn.
 Marlo Coil Co., St. Louis, Mo.
 Modine Mfg. Co., Racine, Wis.
 National Pipe Bending Co., New Haven, Conn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Nesbitt, Inc., John J., Philadelphia, Pa.
 Niagara Blower Co., New York, N. Y.
 Peerless of America, Inc., Chicago, Ill.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Refrigeration Engineering, Inc., Los Angeles, Calif.
 Rempe Co., Chicago, Ill.
 Rigidbilt, Inc., Chicago, Ill.
 Roessing Mfg. Co., Sharpsburg Sta., Pittsburgh, Pa.
 Rome-Turney Radiator Co., Rome, N. Y.
 Super Radiator Corp., Minneapolis, Minn.
 Tenney Engineering, Inc., Union, N. J.
 Trane Co., La Crosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Vilter Mfg. Co., Milwaukee, Wis.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wing Mfg. Co., L. J., Linden, N. J.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

COILS, FIRE POT, DOMESTIC HOT WATER

Adams Co., Dubuque, Iowa.
 Rempe Co., Chicago, Ill.
 Therm Oil Burner Co., Seattle, Wash.

COILS, HEATING

Aerofin Corp., Syracuse, N. Y.
 American Coils, Inc., Newark, N. J.
 Ammerman Co., C. L., Minneapolis, Minn.
 Bayley Blower Co., Milwaukee, Wis.
 Beacon-Morris Corp., Boston, Mass.
 Bush Mfg. Co., West Hartford, Conn.
 Conditionaire Unit Co., Chicago, Ill.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 G & O Mfg. Co., New Haven, Conn.
 Governair Corp., Oklahoma City, Okla.
 Hastings Air Control, Inc., Omaha, Nebr.
 International Mfg. Co., Oklahoma City, Okla.
 Kennard Corp., St. Louis, Mo.
 Kramer Trenton Co., Trenton, N. J.
 Larkin Coils, Inc., Atlanta, Ga.
 McCord Corp., Detroit, Mich.
 McQuay, Inc., Minneapolis, Minn.
 Marlo Coil Co., St. Louis, Mo.
 Modine Mfg. Co., Racine, Wis.
 National Pipe Bending Co., New Haven, Conn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
 Nesbitt, Inc., John J., Philadelphia, Pa.
 New York Blower Co., Chicago, Ill.
 Niagara Blower Co., New York, N. Y.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Refrigeration Engineering, Inc., Los Angeles, Calif.
 Rempe Co., Chicago, Ill.
 Rigidbilt, Inc., Chicago, Ill.
 Roessing Mfg. Co., Pittsburgh, Pa.
 Rome-Turney Radiator Co., Rome, N. Y.
 Super Radiator Corp., Minneapolis, Minn.
 Trane Co., La Crosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Vulcan Radiator Co., Hartford, Conn.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wing Mfg. Co., L. J., Linden, N. J.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

COLLECTORS, BLOW PIPE

Aerotec Corp., The, Greenwich, Conn.
 Agat-Detroit Co., Ann Arbor, Mich.
 American Air Filter Co., Inc., Louisville, Ky.
 American Blower Corp., Detroit, Mich.
 Buffalo Forge Co., Buffalo, N. Y.
 Carolina Blower Co., Inc., Greensboro, N. C.
 Chicago Blower Corp., Franklin Park, Ill.
 Day Co., Minneapolis, Minn.
 Dust Suppression & Engineering Co., Lake Orion, Mich.
 Farr Co., Los Angeles, Calif.
 Goergen-Mackwirth Engineering Co., Buffalo, N. Y.
 Goethel Sheet Metal Works, Inc., Alfred, Milwaukee, Wis.
 Hammond Machinery Builders, Inc., Kalamazoo, Mich.
 Kindt-Collins Co., Cleveland, O.
 Kirk & Blum Mfg. Co., Cincinnati, Ohio.
 Lumm Co., A. H., Toledo, Ohio.
 Newcomb-Detroit Co., Detroit, Mich.
 Northern Blower Co., Cleveland, Ohio.
 Pangborn Corp., Hagerstown, Md.
 Peters-Dalton, Inc., Detroit, Mich.
 Puhl & Hepler Mfg. Co., Inc., St. Louis, Mo.
 Rees Blow Pipe Mfg. Co., Berkeley, Calif.
 Ruemelin Mfg. Co., Milwaukee, Wis.
 Skinner Heating & Vent Co., St. Louis, Mo.
 Sly Mfg. Co., W. W., Cleveland, Ohio.
 Torit Mfg. Co., St. Paul, Minn.
 Western Blower Co., Seattle, Wash.
 Western Precipitation Corp., Los Angeles, Calif.
 Winkler & Sons, Inc., A. E., Milwaukee, Wis.
 Young & Bertke Co., Cincinnati, Ohio.

COMBUSTION CHAMBERS

See Chambers, Combustion, Preformed; Baffles, Combustion Chamber

COMBUSTION CONTROLS

See Controls; Dampers, Draft

COMBUSTION HEADS, OIL BURNER

See Burner Parts, Oil

COMPOUNDS, AIR FRESHENING

Aireactor Corp., New York, N. Y.
Carbide & Carbon Chemicals Co., Div. Union Carbide & Chemical Corp., New York, N. Y.

COMPOUNDS, CAULKING

Allmetal Weatherstrip Co., Chicago, Ill.
American-Marietta Co., Chicago, Ill.
Armstrong Co., Chicago, Ill.
Babbitt Chemical Specialties Co., New Bedford, Mass.
Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Blue Ridge Talc Co., Inc., Henry, Va.
Calbar Paint & Varnish Co., Philadelphia, Pa.
Carey Mfg. Co., Philip, Cincinnati, Ohio.
Carter Paint Co., Liberty, Ind.
Chamberlin Co. of America, Detroit, Mich.
Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
Continental Products Co., Euclid, Ohio.
Division Lead Co., Summit, Ill.
Flintkote Co., New York, N. Y.
Glidden Co., Cleveland, Ohio.
Goodrich Co., B. F., Akron, Ohio.
Hetzl Roofing Products Co., Inc., Newark, N. J.
Horn Co., Inc., A. C., Long Island City, N. Y.
Iowa Paint Mfg. Co., Inc., Des Moines, Ia.
Johns-Manville, New York, N. Y.
Lastic Products Co., Inc., Pittsburgh, Pa.
Meadows, Inc., W. R., Elgin, Ill.
Midland Paint & Varnish Co., Cleveland, Ohio.
Minnesota Mining & Mfg. Co., Adhesives & Coatings Div., Detroit, Mich.
Miracle Adhesives Corp., New York, N. Y.
Mortell Co., J. W., Kankakee, Ill.
National Mfg. Corp., Tonawanda, N. Y.
Nebel Mfg. Co., Cleveland, Ohio.
Ohmlac Paint & Refining Co., Chicago, Ill.
Pabco Products, Inc., San Francisco, Calif.
Pecora Paint Co., Philadelphia, Pa.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Plastic Products Co., Detroit, Mich.
Prestitute Engineering Co., St. Louis, Mo.
Products Research Co., Los Angeles, Calif.
Quigley Co., Inc., New York, N. Y.
Robertson Co., H. H., Pittsburgh, Pa.
S.O.S. Products Co., Inc., Brooklyn, N. Y.
Sherwin-Williams Co., Cleveland, Ohio.
Sipe & Co., James B., Pittsburgh, Pa.
Smooth-on Mfg. Co., Jersey City, N. J.
Sonneborn Sons, Inc., L., New York, N. Y.
Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc., Savannah, Ga.
Tamm Industries Inc., Chicago, Ill.
Thompson & Co., Oakmont, Pa.
Tropical Paint Co., Cleveland, Ohio.
Truscon Laboratories, Detroit, Mich.
Whitlam Mfg. Co., J. C., Wadsworth, O.
X-Pando Corp., Long Island City, N. Y.

COMPOUNDS, CLEANING, AIR FILTER

Carbide & Carbon Chemicals Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
City Chemical Corp., New York, N. Y.
Dollinger Corp., Rochester, N. Y.
Madden Corp., The, Chicago, Ill.
Magnus Chemical Co., Garwood, N. J.
Montgomery Chemical Co., Jenkintown, Pa.
Oakite Products, Inc., New York, N. Y.

COMPOUNDS, CLEANING, CONDENSER AND COIL

American Chemical Paint Co., Ambler, Pa.
Aquatrol Laboratories, Inc., Clifton, N. J.
Carolina Aniline & Extract Co., Inc., Charlotte, N. C.
Chemical Solvent Co., Birmingham, Ala.
Dearborn Chemical Co., Chicago, Ill.
Garman Co., Inc., St. Louis, Mo.
Madden Corp., The, Chicago, Ill.
Magnus Chemical Co., Garwood, N. J.
Metropolitan Refining Co., Inc., Long Island City, N. Y.
North American Mogul Products Co., Cleveland, O.
Oakite Products, Inc., New York, N. Y.

Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Radiator Specialty Co., Charlotte, N. C.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Turco Products, Inc., Los Angeles, Calif.

COMPOUNDS, COLD GALVANIZING

Birchwood Chemical Co., Minneapolis, Minn.
Galvicon Corp., New York, N. Y.
RotoMetals, San Francisco, Calif.

COMPOUNDS, WATER CONDITIONING

See Conditioners, Water

COMPOUNDS, WINTER PROTECTIVE, PUMP

Garman Co., Inc., St. Louis, Mo.

COMPRESSORS, REFRIGERATING, OPEN

(Capacity to 15 tons)

Brunner Mfg. Co., Utica, N. Y.
Carrier Corp., Syracuse, N. Y.
Cobell Industries, Inc., Ft. Worth, Tex. (Gas engine driven)
Copeland Refrigeration Corp., Sidney, Ohio.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Diceler Div. General Machine & Mfg. Co., Berwick, Pa.
Frick Co., Waynesboro, Pa.
Frigidaire Div. General Motors Corp., Dayton, Ohio.
Lehigh Mfg. Co., Lancaster, Pa.
Lipman Refrigeration Div., Yates-American Machine Co., Be-loit, Wis.
Reliance Refrigerating Machine Co., Chicago, Ill.
Reynolds Mfg. Co., Springfield, Mo.
Tecumseh Products Co., Tecumseh, Mich.
Trane Co., LaCrosse, Wis.
Worthington Corp., Harrison, N. J.
Yeomans Bros. Co., Melrose Park, Ill.
York Corp., York, Pa.

COMPRESSORS, REFRIGERATING, SEALED

(Capacity to 15 tons)

Brunner Mfg. Co., Utica, N. Y.
Carrier Corp., Syracuse, N. Y.
Copeland Refrigeration Corp., Sidney, Ohio.
Frigidaire Div., General Motors Corp., Dayton, Ohio.
Lehigh Mfg. Co., Lancaster, Pa.
Servel, Inc., Evansville, Ind.
Tecumseh Products Co., Tecumseh, Mich.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Worthington Corp., Harrison, N. J.
York Corp., York, Pa.

CONDENSERS, REFRIGERATING, AIR COOLED

(Capacity to 15 tons)

Airtemp Div. Chrysler Corp., Dayton, Ohio.
Brunner Mfg. Co., Utica, N. Y.
Buffalo Forge Co., Buffalo, N. Y.
Bush Mfg. Co., West Hartford, Conn.
Carrier Corp., Syracuse, N. Y.
Condenser Service & Engrg. Co., Inc., Hoboken, N. J.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Deansteel Products, San Antonio, Tex.
Diceler Div., General Machine & Mfg. Co., Berwick, Pa.
Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
Fedders-Quigan Corp., Buffalo, N. Y.
Frigidaire Div., General Motors Corp., Dayton, Ohio.
Halstead & Mitchell, Pittsburgh, Pa.
Kramer Trenton Co., Trenton, N. J.
Larkin Coils, Inc., Atlanta, Ga.
Marlo Coil Co., St. Louis, Mo.
McQuay, Inc., Minneapolis, Minn.
Mueller Climatrol, Milwaukee, Wis.
National-U. S. Radiator Corp., Johnstown, Pa.
Perfex Corp., Milwaukee, Wis.
Reape Co., Chicago, Ill.
Rome-Turney Radiator Co., Rome, N. Y.
Super Radiator Corp., Minneapolis, Minn.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Witt Co., A. H., Los Angeles, Calif.
York Corp., York, Pa.

CONDENSERS, REFRIGERATING, EVAPORATIVE

(Capacity to 15 tons)

Acme Industries, Inc., Jackson, Mich.
Air Products, St. Louis, Mo.
Baltimore Aircoil Co., Inc., Baltimore, Md.

Brunner Mfg. Co., Utica, N. Y.
 Buffalo Forge Co., Buffalo, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Carrier Corp., Syracuse, N. Y.
 Circle Flow Condenser Co., Stillwater, Okla.
 Cobell Industries, Inc., Fort Worth, Tex.
 Coleman Co., Inc., Wichita, Kans.
 Condenser Service & Engineering Co., Inc., Hoboken, N. J.
 Crowell & Dunn, Inc., New York, N. Y.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 DeSoto Oil Burner Corp., York, Pa.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Governair Corp., Oklahoma City, Okla.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Kennard Corp., St. Louis, Mo.
 Kramer Trenton Co., Trenton, N. J.
 Larkin Coils, Inc., Atlanta, Ga.
 Marlo Coil Co., St. Louis, Mo.
 McQuay, Inc., Minneapolis, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Niagara Blower Co., New York, N. Y.
 Refrigeration Economics Co., Inc., Canton, O.
 Refrigeration Engineering, Inc., Los Angeles, Calif.
 Servel, Inc., Evansville, Ind.
 Trane Co., The, LaCrosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 Vilter Mfg. Co., Milwaukee, Wis.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Worthington Corp., Harrison, N. J.
 XL Refrigerating Co., Chicago, Ill.
 York Corp., York, Pa.
 Yorktowne Machine Co., Inc., York, Pa.

CONDENSERS, REFRIGERATING, SHELL AND COIL (Capacity to 15 tons)

Acme Industries, Inc., Jackson, Mich.
 Autorad Inc., Chicago, Ill.
 Carrier Corp., Syracuse, N. Y.
 Condenser Service & Engineering Co., Inc., Hoboken, N. J.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Doyle & Roth Mfg. Co., Brooklyn, N. Y.
 General Fittings Co., Providence, R. I.
 Heat-X Inc., Brewster, N. Y.
 Nooter Corp., St. Louis, Mo.
 Refrigeration Economics Co., Inc., Canton, O.
 Rempe Co., Chicago, Ill.
 Rome-Turney Radiator Co., Rome, N. Y.
 Standard Refrigeration Co., Chicago, Ill.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 XL Refrigerating Co., Chicago, Ill.

CONDENSERS, REFRIGERATING, SHELL AND TUBE (Capacity to 15 tons)

Acme Industries, Inc., Jackson, Mich.
 Autorad Inc., Chicago, Ill.
 Carrier Corp., Syracuse, N. Y.
 Condenser Service & Engineering Co., Inc., Hoboken, N. J.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Devine Mfg. Co., J. P., Div. of H. K. Porter Co., Inc., Pittsburgh, Pa.
 Doyle & Roth Mfg. Co., Brooklyn, N. Y.
 Frigidaire Div., General Motors Corp., Dayton, Ohio.
 Howard Iron Works & Alberger Heater Div., Buffalo, N. Y.
 Nooter Corp., St. Louis, Mo.
 Refrigeration Economics Co., Inc., Canton, O.
 Vogt Machine Co., Henry, Louisville, Ky.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Worthington Corp., Harrison, N. J.
 XL Refrigerating Co., Chicago, Ill.
 York Corp., York, Pa.

CONDENSING UNITS, REFRIGERATING, OPEN

Consisting of compressor, condenser, motor, receiver and base
 (Capacity to 15 tons)

Brunner Mfg. Co., Utica, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Copeland Refrigeration Corp., Sidney, O.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Diceler Div., General Machine & Mfg. Co., Berwick, Pa.
 Frick Co., Waynesboro, Pa.
 Frigidaire Div., General Motors Corp., Dayton, Ohio.
 Lehigh Mfg. Co., Lancaster, Pa.
 Lipman Refrigeration Div., Yates-American Machine Co., Beloit, Wis.
 Reliance Refrigerating Machine Co., Chicago, Ill.

Tecumseh Products Co., Tecumseh, Mich.
 Trane Co., LaCrosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.

CONDENSING UNITS, REFRIGERATING, SEALED

Consisting of compressor, condenser, motor, receiver and base
 (Capacity to 15 tons)

Addison Products Co., Addison, Mich.
 Berger Furnace Corp., Belle Vernon, Pa.
 Blissfield Mfg. Co., Blissfield, Mich.
 Brucker, Inc., M., Chicago, Ill.
 Brunner Mfg. Co., Utica, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Century Engineering Corp., Cedar Rapids, Ia.
 Clime-Matic Corp., South Norwalk, Conn.
 Copeland Refrigeration Corp., Sidney, O.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Electromode Div. of Commercial Controls, Rochester, N. Y.
 Frigidaire Div., General Motors Corp., Dayton, Ohio.
 Great Northern Mfg. Corp., Chicago, Ill.
 Henry Furnace Co., Medina, O.
 Lehigh Mfg. Co., Lancaster, Pa.
 Lennox Industries, Inc., Marshalltown, Ia.
 Majestic Co., Inc., Huntington, Ind.
 Mueller Climatrol, Milwaukee, Wis.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Rheem Mfg. Co., Chicago, Ill.
 Rybolt Heater Co., Ashland, O.
 Servel, Inc., Evansville, Ind.
 Shana Mfg. Inc., Chicago, Ill.
 Sutton Corp., O. A., Wichita, Kans.
 Tecumseh Products Co., Tecumseh, Mich.
 Thatcher Furnace Co., Garwood, N. J.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Viking Mfg. Corp., Cleveland, O.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.

CONDITIONERS, WATER

Ampion Corp., Long Island City, N. Y.
 Aquatrol Laboratories, Inc., Clifton, N. J.
 City Chemical Corp., New York, N. Y.
 Dow Chemical Co., Midland, Mich.
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
 Electro Mfg. Co., Houston, Tex. (Magnetic)
 Garman Co., Inc., St. Louis, Mo.
 Madden Corp., The, Chicago, Ill.
 Metropolitan Refining Co., Inc., Long Island City, N. Y.
 Moreheat Distribution Co., Cincinnati, O.
 North American Mogul Products Co., Cleveland, O.
 Oakite Products, Inc., New York, N. Y.
 Packard Mfg. Co., Jacksonville, Fla.
 Saginaw Salt Products Co., Saginaw, Mich.
 Permutit Co., New York, N. Y.

CONDUCTOR PIPE AND FITTINGS

See Pipe and Fittings, Conductor

CONNECTIONS, DUCT, FLEXIBLE

Corbman Bros., Inc., Philadelphia, Pa.
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
 Elgen Mfg. Corp., Long Island City, N. Y.
 Felters Co., Inc., Boston, Mass. (Felt)
 St. Clair Rubber Co., Marysville, Mich. (Fiberglass)
 Sall Mountain Co., Hamilton, O. (Asbestos)
 United States Rubber Co., New York, N. Y. (Asbestos, canvas)
 Ventfabrics, Inc., Chicago, Ill. (Fabric)
 Wagner Awning & Mfg. Co., Cleveland, Ohio.
 Wilson, Inc., Grant, Chicago, Ill. (Asbestos)

CONNECTORS, METAL, FOR METAL DUCTS

Acme Mfg. Co., Philadelphia, Pa.
 Armstrong Fittings Co., Des Moines, Ia.
 Carolina Blower Co., Inc., Greensboro, N. C.
 Corbman Bros., Inc., Philadelphia, Pa.
 Inland Steel Products Co., Milwaukee, Wis.
 Ralph Mfg. Co., Inc., Wadsworth, O.

CONTROL PANELS

See Boards, Panel and Control

CONTROLS, BLOWER, SPEED CHANGING

Airgard Mfg. Co., Chicago, Ill.
Ammerman Co., C. L., Minneapolis, Minn.
Ballastran Corp., Ft. Wayne, Ind.
National Modulation Co., St. Paul, Minn.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, COMBINATION FAN AND LIMIT, LINE OR LOW VOLTAGE

A-P Controls Corp., Milwaukee, Wis.
Automatic Devices Co., Inc., Western Springs, Ill.
Cam-Stat Inc., Div. Paul Henry Co., Los Angeles, Calif.
Cook Electric Co., Chicago, Ill.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Soreng Mfg. Co., Schiller Park, Ill.
Therm-O-Disc, Inc., Mansfield, Ohio.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, COMBUSTION, LINE OR LOW VOLTAGE

Barber-Colman Co., Rockford, Ill.
Bristol Co., Waterbury, Conn.
Combustion Control Corp., Cambridge, Mass.
Crown Controls Co., Inc., New Bremen, Ohio.
Eclipse Fuel Engineering Co., Rockford, Ill.
General Controls Co., Glendale, Calif.
Hays Corp., Michigan City, Ind.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Shallcross Controls, Inc., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, FAN

A-P Controls Corp., Milwaukee, Wis.
Allen-Bradley Co., Milwaukee, Wis.
Automatic Devices Co., Inc., Western Springs, Ill.
Barber-Colman Co., Rockford, Ill.
Cam-Stat, Inc., Div. Paul Henry Co., Los Angeles, Calif.
Clark Controller Co., Cleveland, Ohio.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
Iron Fireman Mfg. Co., Cleveland, Ohio.
McCorkle Co., D. H., Berkeley, Calif.
McLarty Systems, Battle Creek, Mich.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Spencer Thermostat Div. Metals & Controls Corp., Attleboro, Mass.
United Electric Controls Co., Watertown, Mass.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, FUEL OIL, GRAVITY FLOW

A-P Controls Corp., Milwaukee, Wis. (Electric and manual)
Detroit Controls Corp., Detroit, Mich. (Electric and manual)
General Controls Co., Glendale, Calif.

CONTROLS, HUMIDISTATS

Abbeon Supply Co., Jamaica, N. Y.
American Instrument Co., Inc., Silver Spring, Md.
Barber-Colman Co., Rockford, Ill.
Bristol Co., Waterbury, Conn.
Fries Instrument Div., Bendix Aviation Corp., Baltimore, Md.
General Controls Co., Glendale, Calif.
H-B Instrument Co., Inc., Philadelphia, Pa.
Johnson Service Co., Milwaukee, Wis.
Maid-O-Mist, Inc., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Powers Regulator Co., Skokie, Ill.
Taylor Instrument Companies, Rochester, N. Y.
Walton Laboratories, Inc., Irvington, N. J.

CONTROLS, LIMIT, LINE OR LOW VOLTAGE

Allen-Bradley Co., Milwaukee, Wis.
Automatic Devices Co., Inc., Western Springs, Ill.
Barber-Colman Co., Rockford, Ill.
Cam-Stat Inc., Div. Paul Henry Co., Los Angeles, Calif.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., Inc., New Bremen, Ohio.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Iron Fireman Mfg. Co., Cleveland, Ohio.
McCorkle Co., D. H., Berkeley, Calif.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Spencer Thermostat Div. Metals & Controls Corp., Attleboro, Mass.
Therm-O-Disc, Inc., Mansfield, Ohio.
United Electric Controls Co., Watertown, Mass.
Westinghouse Electric Corp., Pittsburgh, Pa.
Western Electrical Instruments Corp., Subsidiary of Daystrom, Inc. Newark, N. J.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, MOTORS, DUCT DAMPER, MODULATING OR PROPORTIONING

Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Barber-Colman Co., Rockford, Ill.
Bristol Co., Waterbury, Conn.
General Controls Co., Glendale, Calif.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

CONTROLS, MOTORS, DRAFT DAMPER, ELECTRICAL

Au-Temp-Co Corp., New York, N. Y.
Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Barber-Colman Co., Rockford, Ill.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., Inc., New Bremen, Ohio.
Defender Instrument & Regulator Co., St. Louis, Mo.
General Controls Co., Glendale, Calif.
Heat-Timer Corp., New York, N. Y.
Kol-Master Corp., Oregon, Ill.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Square D Co., Detroit, Mich.
White Mfg. Co., St. Paul, Minn.

CONTROLS, MOTORS, DUCT DAMPER, TWO POSITION

Au-Temp-Co Corp., New York, N. Y.
Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Barber-Colman Co., Rockford, Ill.
Bristol Co., Waterbury, Conn.
Crise Controls, Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., Inc., New Bremen, Ohio.
Heat-Timer Corp., New York, N. Y.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Perfex Corp., Milwaukee, Wis.

CONTROLS, PILOT, GAS BURNER

A-P Controls Corp., Milwaukee, Wis.
American Control Co., Compton, Calif.
Cleveland Heater Co., Cleveland, Ohio.
Continental Instrument Co., Cleveland, Ohio.
Drying Systems, Inc., Chicago, Ill.
Eclipse Fuel Engineering Co., Rockford, Ill.
General Controls Co., Glendale, Calif.
Mercoid Corp., Chicago, Ill.
Milwaukee Gas Specialty Co., Milwaukee, Wis.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Modern Materials, Inc., Northville, Mich.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Roberts-Gordon Appliance Corp., Buffalo, N. Y.
Robertshaw Thermostat Div. Robertshaw-Fulton Controls Co., Youngwood, Pa.
Screw Machine Products, Irwin, Pa.
Therm-O-Disc, Inc., Mansfield, Ohio.
Titan Valve & Mfg. Co., Cleveland, Ohio.
White-Rodgers Electric Co., St. Louis, Mo.
Zink Co., John, Tulsa, Okla.

CONTROLS, PRESSURE, REFRIGERATING

A-P Controls Corp., Milwaukee, Wis.
Allen-Bradley Co., Milwaukee, Wis.
Automatic Control Co., St. Paul, Minn.
Barber-Colman Co., Rockford, Ill.
Barksdale Valves, Los Angeles, Calif.
Cook Electric Co., Chicago, Ill.
Marsh Corp., Jas. P., Skokie, Ill.
McQuay-Norris Mfg. Co., St. Louis, Mo.
Mercoird Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Powers Regulator Co., Skokie, Ill.
Ranco Inc., Columbus, Ohio.
Shallcross Controls, Inc., Milwaukee, Wis.
Soreng Mfg. Co., Schiller Park, Ill.
Square D Co., Industrial Controller Div., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, RELAYS, ELECTRICAL

AEMCo., Inc., Mankato, Minn.
Allen-Bradley Co., Milwaukee, Wis.
American Instrument Co., Inc., Silver Spring, Md.
Arrow-Hart & Hegeman Electric Co., Hartford, Conn.
Automatic Switch Co., Orange, N. J.
Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Barber-Colman Co., Rockford, Ill.
Burke Engineering Co., Los Angeles, Calif.
Clark Controller Co., Cleveland, Ohio.
Cramer Co., Inc., R. W., Centerbrook, Conn.
Cutler-Hammer, Inc., Milwaukee, Wis.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Guardian Electric Mfg. Co., Chicago, Ill.
Hart Mfg. Co., Hartford, Conn.
H-B Instrument Co., Philadelphia, Pa.
Industrial Engineering Corp., Terre Haute, Ind.
Iron Fireman Mfg. Co., Cleveland, Ohio.
McCorkle Co., D. H., Berkeley, Calif.
Mercoird Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Monitor Controller Co., The, Cambridge, Mass.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Philadelphia Thermometer Co., Philadelphia, Pa.
Photoswitch Div., Electronics Corp. of America, Cambridge, Mass.
Precision Thermometer & Instrument Co., Philadelphia, Pa.
Reynolds Electric Co., River Grove, Ill.
Soreng Mfg. Co., Schiller Park, Ill.
Spencer Thermostat Div., Metals & Controls Corp., Attleboro, Mass.
Square D Co., Detroit, Mich.
Square D Co., Industrial Controller Div., Milwaukee, Wis.
Ward Leonard Electric Co., Mt. Vernon, N. Y.
Westinghouse Electric Corp., Pittsburgh, Pa.
Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.
White-Rodgers Electric Co., St. Louis, Mo.
Zenith Electric Co., Chicago, Ill.

CONTROLS, SWITCHES, MAGNETIC

ACEC Electric Corp., New York, N. Y.
Allen-Bradley Co., Milwaukee, Wis.
Arrow-Hart & Hegeman Electric Co., Hartford, Conn.
Automatic Electric Mfg. Co., Mankato, Minn.
Automatic Switch Co., Orange, N. J.
Barber-Colman Co., Rockford, Ill.
Clark Controller Co., Cleveland, Ohio.
Cutler-Hammer, Inc., Milwaukee, Wis.
Detroit Controls Corp., Detroit, Mich.
Electric Controller & Mfg. Co., Cleveland, Ohio.
Furnas Electric Co., Batavia, Ill.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Guardian Electric Mfg. Co., Chicago, Ill.
H-B Instrument Co., Philadelphia, Pa.
Hart Mfg. Co., Hartford, Conn.
Industrial Engineering Corp., Terre Haute, Ind.
Mercoird Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Monitor Controller Co., The, Cambridge, Mass.
Palmer Electric Co., Chicago, Ill.
Penn Controls, Inc., Goshen, Ind.

Perfex Corp., Milwaukee, Wis.
Soreng Mfg. Co., Schiller Park, Ill.
Square D Co., Detroit, Mich.
Square D Co., Indus. Controller Div., Milwaukee, Wis.
Ward Leonard Electric Co., Mt. Vernon, N. Y.
Westinghouse Electric Corp., Pittsburgh, Pa.
White-Rodgers Electric Co., St. Louis, Mo.
Zenith Electric Co., Chicago, Ill.

CONTROLS, SWITCHES, MANUAL

ACEC Electric Corp., New York, N. Y.
Allen-Bradley Co., Milwaukee, Wis.
Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Arrow-Hart & Hegeman Electric Co., Hartford, Conn.
Barber-Colman Co., Rockford, Ill.
Burke Engineering Co., Los Angeles, Calif.
Clark Controller Co., Cleveland, Ohio.
Cutler-Hammer, Inc., Milwaukee, Wis.
Furnas Electric Co., Batavia, Ill.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Hart Mfg. Co., Hartford, Conn.
Industrial Engineering Corp., Terre Haute, Ind.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Soreng Mfg. Co., Schiller Park, Ill.
Square D Co., Detroit, Mich.
Square D Co., Indus. Controller Div., Milwaukee, Wis.
Ward Leonard Electric Co., Mount Vernon, N. Y.
Westinghouse Electric Corp., Pittsburgh, Pa.

CONTROLS, SWITCHES, TIME

AEMCo., Inc., Mankato, Minn.
Allen-Bradley Co., Milwaukee, Wis.
Au-Temp-Co Corp., New York, N. Y.
Automatic Devices Co., Inc., Western Springs, Ill.
Automatic Switch Co., Orange, N. J.
Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Barber-Colman Co., Rockford, Ill.
Bristol Co., Waterbury, Conn.
Clark Controller Co., Cleveland, Ohio.
Cramer Co., Inc., The R. W., Centerbrook, Conn.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Industrial Engineering Corp., Terre Haute, Ind.
International Register Co., Chicago, Ill.
Iron Fireman Mfg. Co., Cleveland, O.
Mercoird Corp., Chicago, Ill.
Miller-Harris Instrument Co., Milwaukee, Wis.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Paragon Electric Co., Two Rivers, Wis.
Perfex Corp., Milwaukee, Wis.
Photoswitch Div., Electronics Corp. of America, Cambridge, Mass.
R. B. Enterprises, Inc., Detroit, Mich.
Reliance Automatic Lighting Co., Racine, Wis.
Reynolds Electric Co., River Grove, Ill.
Rhodes, Inc., M. H., Hartford, Conn.
Sangamo Electric Co., Springfield, Ill.
Telechron, Inc., Ashland, Mass.
Tork Clock Co., Inc., Mt. Vernon, N. Y.
Westinghouse Electric Corp., Pittsburgh, Pa.
West Wind Corp., Seattle, Wash.
White-Rodgers Electric Co., St. Louis, Mo.
Zenith Electric Co., Chicago, Ill.

CONTROLS, THERMOSTATS, CLOCK, DAY AND NIGHT

Automatic Devices Co., Inc., Weather Controls Div., Western Springs, Ill.
Barber-Colman Co., Rockford, Ill.
Crown Controls Co., Inc., New Bremen, Ohio.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
Heat-Timer Corp., New York, N. Y.
Iron Fireman Mfg. Co., Cleveland, Ohio.
McQuay-Norris Mfg. Co., St. Louis, Mo.
Mercoird Corp., Chicago, Ill.
Miller-Harris Instrument Co., Milwaukee, Wis.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Perfex Corp., Milwaukee, Wis.
Sarcotherm Controls, Inc., New York, N. Y.
Tork Clock Co., Inc., Mt. Vernon, N. Y.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, THERMOSTATS, COMBINATION HEATING AND AIR CONDITIONING

Barber-Colman Co., Rockford, Ill.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Powers Regulator Co., Skokie, Ill.

CONTROLS, THERMOSTATS, DOMESTIC WATER HEATER

A-P Controls Corp., Milwaukee, Wis.
American Control Co., Compton, Calif.
American Instrument Co., Inc., Silver Spring, Md.
Cam-Stat Inc., Div. Paul Henry Co., Los Angeles, Calif.
Cleveland Heater Co., Cleveland, Ohio.
Cutler-Hammer, Inc., Milwaukee, Wis.
General Controls Co., Glendale, Calif.
Hart Mfg. Co., Hartford, Conn.
Hynes & Cox Electric Corp., Watervliet, N. Y.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Perfex Corp., Milwaukee, Wis.
Powers Regulator Co., Skokie, Ill.
Robertshaw Thermostat Div., Robertshaw-Fulton Controls Co., Youngwood, Pa.
Therm-O-Disc, Inc., Mansfield, Ohio.
Titan Valve & Mfg. Co., Cleveland, Ohio.
Westinghouse Electric Corp., Pittsburgh, Pa.

CONTROLS, THERMOSTATS, ELECTRONIC

Barber-Colman Co., Rockford, Ill.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, THERMOSTATS, HEAT ACCELERATED OR ANTICIPATING

A-P Controls Corp., Milwaukee, Wis.
Barber-Colman Co., Rockford, Ill.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., Inc., New Bremen, Ohio.
Detroit Controls Corp., Detroit, Mich.
Fulton Sylphon Div. Robertshaw-Fulton Controls Co., Knoxville, Tenn.
General Controls Co., Glendale, Calif.
H-B Instrument Co., Philadelphia, Pa.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Sarcotherm Controls, Inc., New York, N. Y.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, THERMOSTATS, LINE OR LOW VOLTAGE

A-P Controls Corp., Milwaukee, Wis.
Allen-Bradley Co., Milwaukee, Wis.
American Instrument Co., Inc., Silver Spring, Md.
Barber-Colman Co., Rockford, Ill.
Cam-Stat Inc., Div. Paul Henry Co., Los Angeles, Calif.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., Inc., New Bremen, Ohio.
Detroit Controls Corp., Detroit, Mich.
Fenwal Inc., Ashland, Mass.
Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Knoxville, Tenn.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
H-B Instrument Co., Philadelphia, Pa.
Iron Fireman Mfg. Co., Cleveland, Ohio.
McCorkle Co., D. H., Berkeley, Calif.
McQuay-Norris Mfg. Co., St. Louis, Mo.
Mercoird Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Robertshaw Thermostat Div., Robertshaw-Fulton Controls Co., Youngwood, Pa.
Sarco Co., Inc., New York, N. Y.
Sarcotherm Controls, Inc., New York, N. Y.
Soreng Mfg. Co., Schiller Park, Ill.
Spencer Thermostat Div. Metals & Controls Corp., Attleboro, Mass.
Therm-O-Disc, Inc., Mansfield, Ohio.
United Electric Controls Co., Watertown, Mass.
Westinghouse Electric Corp., Pittsburgh, Pa.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, THERMOSTATS, MODULATING OR PROPORTIONING

A-P Controls Corp., Milwaukee, Wis.

Atlas Valve Co., Newark, N. J.
Automatic Devices Co., Inc., Western Springs, Ill.
Barber-Colman Co., Rockford, Ill.
Defender Instrument & Regulator Co., St. Louis, Mo.
Fenwal, Inc., Ashland, Mass.
Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Knoxville, Tenn.
Johnson Service Co., Milwaukee, Wis.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Payne Beverly Mfg. Co., Beverly Hills, Calif.
Powers Regulator Co., Skokie, Ill.
Security Valves Corp., Glendale, Calif.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROLS, THERMOSTATS, WEATHER COMPENSATING

Au-Temp-Co Corp., New York, N. Y.
Automatic Devices Co., Inc., Weather Controls Div., Western Springs, Ill.
Barber-Colman Co., Rockford, Ill.
Detroit Controls Corp., Detroit, Mich.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Heat-Timer Corp., New York, N. Y.
Illinois Engineering Co., Chicago, Ill.
Johnson Service Co., Milwaukee, Wis.
McLarty Systems, Battle Creek, Mich.
Miller Heat-O-Meter Co., Milwaukee, Wis.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Powers Regulator Co., Skokie, Ill.
Sarcotherm Controls, Inc., New York, N. Y.
United Electric Controls Co., Watertown, Mass.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, ACCESSORIES

Terminals, terminal blocks, connectors, ignition cable, thermostat cable, etc.

Barber-Colman Co., Rockford, Ill.
Buchanan Electric Products Corp., Hillside, N. J.

CONTROL SYSTEMS, FLAME FAILURE

American District Telegraph Co., New York, N. Y.
Barber-Colman Co., Rockford, Ill.
Bristol Co., The, Waterbury, Conn.
Canton Stoker Corp., Canton, Ohio.
Combustion Control Div., Electronics Corp. of America, Boston, Mass.
Drying Systems, Inc., Chicago, Ill.
Eclipse Fuel Engineering Co., Rockford, Ill.
Fuelguard Co., Dallas, Texas.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Haney Gas Burner & Engrs., Monrovia, Calif.
Mercoird Corp., Chicago, Ill.
Mettler Co., Inc., The, Los Angeles, Calif.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Wheelco Instruments Div., Barber-Colman Co., Rockford, Ill.

CONTROL SYSTEMS, GAS BURNER, COMPLETE ASSEMBLY

A-P Controls Corp., Milwaukee, Wis.
Detroit Controls Corp., Detroit, Mich.
Eclipse Fuel Engineering Co., Rockford, Ill.
General Controls Co., Glendale, Calif.
Haney Gas Burner & Engrs., Monrovia, Calif.
Hays Corp., Michigan City, Ind.
Iron Fireman Mfg. Co., Cleveland, O.
Mettler Co., Inc., Los Angeles, Calif.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Mueller Climatrol, Milwaukee, Wis.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
R. B. Enterprises, Inc., Detroit, Mich.
Wheelco Instruments Div., Barber-Colman Co., Rockford, Ill.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, GRAVITY FURNACE, HAND-FIRED, COMPLETE ASSEMBLY

Barber-Colman Co., Rockford, Ill.
Bealce Products Co., Green Bay, Wis.
Crise Controls Div. Acro Mfg. Co., Columbus, Ohio.
Crown Controls Co., New Bremen, Ohio.
Defender Instrument & Regulator Co., St. Louis, Mo.
General Controls Co., Glendale, Calif.
Mercoird Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, HEATING, VENTILATING, AND AIR CONDITIONING, ELECTRICAL

Barber-Colman Co., Rockford, Ill.
Burke Engineering Co., Los Angeles, Calif.
Clark Controller Co., Cleveland, Ohio.
Crise Controls Div., Acro Mfg. Co., Columbus, Ohio.
General Controls Co., Glendale, Calif.
Mercoid Corp., Chicago, Ill.
Midwest Automatic Control Co., Des Moines, Iowa.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, OIL BURNER, COMPLETE ASSEMBLY

A-P Controls Corp., Milwaukee, Wis.
Detroit Controls Corp., Detroit, Mich.
General Controls Co., Glendale, Calif.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Hays Corp., Michigan City, Ind.
Heat-Timer Corp., New York, N. Y.
Iron Fireman Mfg. Co., Cleveland, O.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Shallcross Controls Inc., Milwaukee, Wis.
Wheelco Instruments Div., Barber-Coleman Co., Rockford, Ill.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, STOKER, COMPLETE ASSEMBLY

Defender Instrument & Regulator Co., St. Louis, Mo.
Hays Corp., Michigan City, Ind.
Heat-Timer Corp., New York, N. Y.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Palmer Electric Co., Chicago, Ill.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Shallcross Controls Co., Inc., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, WINTER AIR CONDITIONING FURNACE, HAND FIRED, COMPLETE ASSEMBLY

Barber-Colman Co., Rockford, Ill.
Crown Controls Co., Inc., New Bremen, Ohio.
General Controls Co., Glendale, Calif.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
White-Rodgers Electric Co., St. Louis, Mo.

CONTROL SYSTEMS, ZONE, COMPLETE ASSEMBLY

Au-Temp-Co Corp., New York, N. Y.
Barber-Colman Co., Rockford, Ill.
Burke Engineering Co., Los Angeles, Calif.
Crise Controls Div., Acro Mfg. Co., Columbus, Ohio.
General Controls Co., Glendale, Calif.
Heat-Timer Corp., New York, N. Y.
Johnson Service Co., Milwaukee, Wis.
Mercoid Corp., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Penn Controls, Inc., Goshen, Ind.
Perfex Corp., Milwaukee, Wis.
Powers Regulator Co., Skokie, Ill.
Young Regulator Co., Cleveland, O.

COOLING COILS

See Coils, Cooling

COOLING UNITS

See Units, Air Conditioning

COOLING TOWERS

See Towers, Cooling

COPPER PIPE

See Tubing, Copper

COPPER SHEETS

See Sheets, Metal, Copper

COPPER TUBE FITTINGS

See Fittings, Copper Tube

COVERS, WINDOW AIR CONDITIONER

See Protectors, Window Air Conditioner

CRIMPING MACHINES

See Machines, Crimping

CURTAIN WALL PANELS

See Panels, Curtain Wall

DAMPER, DUCT, REGULATOR SETS

See Regulators, Duct Damper Sets

DAMPER MOTORS

See Controls, Motors

DAMPERS, BACK DRAFT

See Louvers and Shutters

DAMPERS, DIFFUSER

Air Control Products, Inc., Coopersville, Mich.
Air-Factors, Inc., Monrovia, Calif.
Anemostat Corp. of America, New York, N. Y.
Barber-Colman Co., Rockford, Ill.
Gallagher Co., Omaha, Nebr.
Hart & Cooley Mfg. Co., Holland, Mich.
Smith Co., J. B., Philadelphia, Pa.
Titus Mfg. Corp., Waterloo, Ia.
United States Register Co., Battle Creek, Mich.

DAMPERS, DRAFT, BAROMETRIC

Atlas Valve Co., Newark, N. J.
Boston Machine Works Co., Lynn, Mass.
Cole-Sewell Engineering Co., St. Paul, Minn.
Combustion Equipment Co., Silvis, Ill.
Duo-Therm Div., Motor Wheel Corp., Lansing, Mich.
Empire Ventilation Equipment Co., Long Island City, N. Y.
Field Control Div., H. D. Conkey & Co., Mendota, Ill.
Fuel Reduction Corp., Chicago, Ill.
Hotstream Heater Co., Cleveland, Ohio.
Jordan & Co., Inc., Paul R., Indianapolis, Ind.
Juniper Elbow Co., Inc., Middle Village, L. I., N. Y.
Krueger Sentry Gauge Co., Green Bay, Wis.
Mirror Patented Stove Pipe Co., Hartford, Conn.
Perfex Corp., Milwaukee, Wis.
Preferred Utilities Mfg. Corp., New York, N. Y.
Shallcross Controls, Inc., Milwaukee, Wis.
Simplex Mfg. Co., Fond du Lac, Wis.
Steinen Mfg. Co., Wm., Newark, N. J.
Walker Mfg. & Sales Corp., St. Joseph, Mo.
Wilder Products Co., Springfield, O.
Windmaster, Inc., Columbus, Ohio.

DAMPERS, DRAFT, FIREPLACE

Bennett-Ireland, Inc., Norwich, N. Y.
Heatilator, Inc., Syracuse, N. Y.

DAMPERS, DUCT

Acme Mfg. Co., Philadelphia, Pa.
Adelta Mfg. Co., Philadelphia, Pa.
Air-Factors, Inc., Monrovia, Calif.
Air & Refrigeration Corp., New York, N. Y.
Anemostat Corp. of America, New York, N. Y.
Armstrong Fittings Co., Des Moines, Ia.
Berger Furnace Corp., Belle Vernon, Pa.
Connecticut State Furnace Co., Bridgeport, Conn.
Corbman Bros., Inc., Philadelphia, Pa.
Damp-Vent Co., Bettendorf, Ia.
Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
Elgen Mfg. Corp., Long Island City, N. Y.
Felter Co., John Modern Metals Div., Houston, Tex.
General Register Corp., Cedar Grove, N. J.
Hart & Cooley Mfg. Co., Holland, Mich.
Inland Steel Products Co., Milwaukee, Wis.
Johnson Service Co., Milwaukee, Wis.
United States Register Co., Battle Creek, Mich.
Waterloo Register Co., Inc., Waterloo, Iowa.
Williamson Co., The, Cincinnati, O.
Young Regulator Co., Cleveland, O.

DAMPERS, SMOKE PIPE

Acme Mfg. Co., Philadelphia, Pa.
Adams Co., Dubuque, Iowa.
Adelta Mfg. Co., Philadelphia, Pa.
Berger Furnace Corp., Belle Vernon, Pa.
Buckeye Furnace Pipe Co., Columbus, Ohio.
Char-Gale Mfg. Co., Anoka, Minn.

Corbman Bros., Inc., Philadelphia, Pa.
 Eselgroth & Co., Newark, N. J.
 Hotstream Heater Co., Cleveland, Ohio.
 Howes-Woods Co., Cambridge, Mass.
 Inland Steel Products Co., Milwaukee, Wis.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Keith Furnace Co., Des Moines, Iowa.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Mirror Patented Stove Pipe Co., Hartford, Conn.
 Mueller Climatrol, Milwaukee, Wis.
 National Fuel Conservation Co., Inc., White Plains, N. Y.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Preferred Utilities Mfg. Corp., New York, N. Y.
 Superior Metal Fabricating Co., Niles, O.
 United States Register Co., Battle Creek, Mich.
 Walker Mfg. & Sales Corp., St. Joseph, Mo.
 Wheeling Corrugating Co., Wheeling, W. Va.
 Wilder Products Co., Springfield, O.
 Williamson Co., The, Cincinnati, O.

DAMPERS, STACK HEAD

Acme Furnace Fitting Co., Chicago, Ill.
 Acme Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Aireflo Furnace Pipe Co., Brighton, Mich.
 Air-Factors, Inc., Monrovia, Calif.
 Barber-Colman Co., Rockford, Ill.
 Buckeye Furnace Pipe Co., Columbus, Ohio.
 Champion Furnace Pipe Co., Peoria, Ill.
 Corbman Bros., Inc., Philadelphia, Pa.
 Excelsior Steel Furnace Co., Chicago, Ill.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Superior Metal Fabricating Co., Niles, O.
 Truscon Steel Co., Youngstown, Ohio.
 Williamson Co., The, Cincinnati, O.

DAMPERS, WARM AIR PIPE

Acme Furnace Fitting Co., Chicago, Ill.
 Acme Mfg. Co., Philadelphia, Pa.
 Aireflo Furnace Pipe Co., Brighton, Mich.
 Adams Co., Dubuque, Iowa.
 Armstrong Fittings Co., Des Moines, Ia.
 Berger Furnace Corp., Belle Vernon, Pa.
 Buckeye Furnace Pipe Co., Columbus, Ohio.
 Champion Furnace Pipe Co., Peoria, Ill.
 Char-Gale Mfg. Co., Anoka, Minn.
 Corbman Bros., Inc., Philadelphia, Pa.
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
 Excelsior Steel Furnace Co., Chicago, Ill.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Inland Steel Products Co., Milwaukee, Wis.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Malco Products, Minneapolis, Minn.
 Peerless Foundry Co., Indianapolis, Ind.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Ralph Mfg. Co., Inc., Wadsworth, Ohio.
 Standard Furnace Supply Co., Ltd., Omaha, Nebr.
 Thor Metal Products Co., Inc., Syracuse, N. Y.
 United States Register Co., Battle Creek, Mich.
 Wheeling Corrugating Co., Wheeling, W. Va.
 Williamson Co., The, Cincinnati, O.
 Young Regulator Co., Cleveland, O.

DECKING, ROOF, METAL

Airtherm Mfg. Co., St. Louis, Mo.
 Ceco Steel Products Corp., Chicago, Ill.
 Detroit Steel Products Co., Detroit, Mich.
 Inland Steel Products Co., Milwaukee, Wis.
 Mahon Co., R. C., Detroit, Mich.
 Plasteel Products Corp., Washington, Pa.
 Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.
 (Aluminum)
 Republic Steel Corp., Cleveland, O.
 Reynolds Metals Co., Louisville, Ky.
 Robertson Co., H. H., Pittsburgh, Pa.
 Truscon Steel Div., Republic Steel Corp., Youngstown, O.
 United States Gypsum Co., Chicago, Ill.
 Wheeling Corrugating Co., Wheeling, W. Va.

DEHUMIDIFIERS, ABSORPTION AND ADSORPTION

Air Conditioning Engineering Co., Cambridge, Mass.
 Air and Refrigeration Corp., New York, N. Y.
 Bryant Div. of Carrier Corp., Indianapolis, Ind. (Adsorption)

Carbide and Carbon Chemicals Co., Div. Union Carbide & Chemical Corp., New York, N. Y. (Ethylene glycol)
 Cargocaire Engineering Corp., New York, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Desomatic Products, Inc., Falls Church, Va.
 Dryomatic Corp., Alexandria, Va.
 Floridin Co., Tallahassee, Fla.
 Kaufman Co., H. J., Detroit, Mich. (Absorption)
 Pittsburgh Lectordryer Corp., Pittsburgh, Pa.
 Rodgers Diesel & Air Craft Corp., New York, N. Y.
 Speco, Inc., Cleveland, O.
 Surface Combustion Corp., Toledo, Ohio.
 Tamms Industries Inc., Chicago, Ill.
 York Corp., York, Pa.

DEHUMIDIFIERS, REFRIGERATING TYPE, PORTABLE

Blissfield Mfg. Co., Blissfield, Mich.
 Ebco Mfg. Co., Columbus, Ohio.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Fedders-Quigan Corp., Buffalo, N. Y.
 Fresh'nd-Aire Co., Div. of Cory Corp., Chicago, Ill.
 Frigidaire Div., General Motors Corp., Dayton, O.
 Haertel Co., Walter, Minneapolis, Minn.
 Hotpoint Co., Chicago, Ill.
 Kauffman Air Conditioning Co., St. Louis, Mo.
 McGraw Electric Co., Loneragan Mfg. Div., Albion, Mich.
 Meier Electric & Machine Co., Inc., Indianapolis, Ind.
 Mitchell Mfg. Co., Chicago, Ill.
 Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.
 Victor Products Corp., Hagerstown, Md.
 Walton Laboratories, Inc., Irvington, N. J.
 Westinghouse Elec. Corp., Elec. Appliance Div., Springfield, Mass.

DEHYDRATORS, REFRIGERANT

A-P Controls Corp., Milwaukee, Wis.
 Ansul Chemical Co., Refrigeration Div., Marinette, Wis.
 Eagle Chemical Co., Inc., Chicago, Ill.
 Henry Valve Co., Melrose Park, Ill.
 Imperial Brass Mfg. Co., Chicago, Ill.
 McIntire Co., The, Livingston, N. J.
 Mueller Brass Co., Port Huron, Mich.
 Remco, Inc., Zelenople, Pa.
 Sporlan Valve Co., St. Louis, Mo.
 Stewart Industries Inc., Clifton, N. J.
 Superior Valve and Fittings Co., Pittsburgh, Pa.
 Techniflex Corp., Port Jervis, N. Y.
 Wabash Mfg. Co., Chicago, Ill.

DETECTORS, LEAK, REFRIGERANT

Bernz Co., Otto, Rochester, N. Y.
 Gates & Co., Inc., George W., Franklin Sq., L. I., N. Y.
 Insto-Gas Corp., Detroit, Mich.
 Justrite Mfg. Co., Chicago, Ill.
 Linde Air Products Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
 Stewart Industries Inc., Clifton, N. J.
 Vacuum-Electronic Engineering Co., New Hyde Park, N. Y.
 Velocity-Power Tool Co., Pittsburgh, Pa.

DIES, PRESS BRAKE

(Also see *Machines, Sheet Metal Working, Presses*)

Cincinnati Shaper Co., Cincinnati, O.
 Davis & Son Machine Works, Los Angeles, Calif.
 Doelger & Kirsten, Inc., Milwaukee, Wis.
 Dreis & Krump Mfg. Co., Chicago, Ill.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Ohio Sheet Metal Die Co., Cleveland, O.
 Pacific Industrial Mfg. Co., Oakland, Calif.
 Reiner & Campbell Co., Inc., Newark, N. J.

DIFFUSERS, AIR, BASEBOARD

A & A Register Co., Cleveland, O.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Air Devices, Inc., New York, N. Y.
 American Diffuser Co., Cleveland, O.
 Auer Register Co., Cleveland, O.
 Berger Furnace Corp., Belle Vernon, Pa.
 Brandes Co., Madison, Wis.
 Char-Gale Mfg. Co., Anoka, Minn.
 Coleman Co., Inc., Wichita, Kans.
 Corbman Bros., Inc., Philadelphia, Pa.
 Crane Co., Chicago, Ill.
 Flangeklamp Corp., Buffalo, N. Y.
 General Automatic Products Corp., Baltimore, Md.

General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 Gerwin Industries, Thermo-Base Div., Michigan City, Ind.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Hayes Products Co., Portsmouth, Va.
 Heating Assurance, Inc., Spokane, Wash.
 Independent Register Co., Cleveland, O.
 Jetronaire, Inc., Pittsburgh, Pa.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kritzer Radiant Coils, Inc., Chicago, Ill.
 Lennox Industries, Inc., Marshalltown, Ia.
 Lima Register Co., Lima, Ohio.
 Midco Register Corp., St. Paul, Minn.
 National Grille & Register Co., Cleveland, O.
 Patco Mfg. Co., Philadelphia, Pa.
 Premier Furnace Co., Dowagiac, Mich.
 Radiant-Aire Corp., Michigan City, Ind.
 Republic Products Co., Philadelphia, Pa.
 Rock Island Register Co., Rock Island, Ill.
 Ryniker Steel Products Co., Billings, Mont.
 Smith Co., J. B., Philadelphia, Pa.
 Standard Stamping & Perforating Co., Chicago, Ill.
 Steel City Furnace Co., Springdale, Pa.
 Sundstrom Pressed Steel, Chicago, Ill.
 Titus Mfg. Corp., Waterloo, Iowa.
 Tri-a-lum Products Co., Chicago, Ill.
 United States Register Co., Battle Creek, Mich.
 Vectaire Mfg. Co., Melrose, Mass.
 Viking Mfg. Corp., Cleveland, O.
 Vulcan Radiator Co., Hartford, Conn.
 Wellcome Engineering Co., Del., Clarendon Hills, Ill.
 York-Shipley, Inc., York, Pa.

DIFFUSERS, AIR, CEILING

A & A Register Co., Cleveland, Ohio.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Air Devices, Inc., New York, N. Y.
 Air Distribution Products Co., Los Angeles, Calif.
 Air-Factors, Inc., Monrovia, Calif.
 Airfan Engineering Co., Los Angeles, Calif.
 Aladdin Heating Corp., Oakland, Calif.
 Anemostat Corp. of America, New York, N. Y.
 Ashburn Supply Co., Culver City, Calif.
 Barber-Colman Co., Rockford, Ill.
 Carnes Corp., Verona, Wis.
 Char-Gale Mfg. Co., Anoka, Minn.
 Coleman Co., Inc., Wichita, Kans.
 Connor Engineering Corp., Danbury, Conn.
 Corbman Bros., Inc., Philadelphia, Pa.
 Demuth & Sons, Inc., Charles, Mineola, L. I., N. Y.
 Gallaher Co., Omaha, Nebr.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Independent Register Co., Cleveland, O.
 Krueger Air Conditioning Co., Tucson, Ariz.
 Lima Register Co., Lima, Ohio.
 Midco Register Corp., St. Paul, Minn.
 Pyle-National Co., Multi-Vent Div., Chicago, Ill.
 Titus Mfg. Corp., Waterloo, Iowa.
 Tuttle & Bailey, Inc., New Britain, Conn.
 Universal Diffuser Corp., New York, N. Y.
 United States Register Co., Battle Creek, Mich.
 Viking Mfg. Corp., Cleveland, O.

DIFFUSERS, AIR, FLOOR

A & A Register Co., Cleveland, O.
 A-J Mfg. Co., Kansas City, Mo.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Air Devices, Inc., New York, N. Y.
 American Diffuser Co., Cleveland, O.
 Auer Register Co., Cleveland, O.
 Char-Gale Mfg. Co., Anoka, Minn.
 Corbman Bros., Inc., Philadelphia, Pa.
 Crane Co., Chicago, Ill.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Independent Register Co., Cleveland, O.
 Knowles Mushroom Ventilator Co., Upper Montclair, N. J.
 (Circular)
 Lennox Industries, Inc., Marshalltown, Ia.
 Lima Register Co., Lima, O.
 Midco Register Corp., St. Paul, Minn.
 Rock Island Register Co., Rock Island, Ill.
 Smith Co., J. B., Philadelphia, Pa.
 United States Register Co., Battle Creek, Mich.
 Viking Mfg. Corp., Cleveland, O.

DIFFUSERS, AIR, HIGH PRESSURE

Anemostat Corp. of America, New York, N. Y.
 Barber-Colman Co., Rockford, Ill.
 Connor Engineering Corp., Danbury, Conn.
 Demuth & Sons, Inc., Charles, Mineola, L. I., N. Y.
 Tuttle & Bailey, Inc., New Britain, Conn.

DIFFUSERS, AIR, LIGHTING FIXTURE COMBINATION

Air Devices, Inc., New York, N. Y.
 Anemostat Corp. of America, New York, N. Y.
 Barber-Colman Co., Rockford, Ill.
 Carnes Corp., Verona, Wis.
 Connor Engineering Corp., Danbury, Conn.
 Demuth & Sons, Inc., Charles, Mineola, L. I., N. Y.
 Universal Diffuser Corp., New York, N. Y.

DIFFUSERS, AIR, WALL

A & A Register Co., Cleveland, O.
 A-J Mfg. Co., Kansas City, Mo.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Air Devices, Inc., New York, N. Y.
 Air-Factors, Inc., Monrovia, Calif.
 Anemostat Corp. of America, New York, N. Y.
 Auer Register Co., Cleveland, O.
 Barber-Colman Co., Rockford, Ill.
 Carnes Corp., Verona, Wis.
 Char-Gale Mfg. Co., Anoka, Minn.
 Coleman Co., Inc., Wichita, Kans.
 Corbman Bros., Inc., Philadelphia, Pa.
 Demuth & Sons, Inc., Charles, Mineola, L. I., N. Y.
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Cond. Div., Bloomfield, N. J.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Independent Register Co., Cleveland, O.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Lennox Industries, Inc., Marshalltown, Ia.
 Lima Register Co., Lima, O.
 Midco Register Corp., St. Paul, Minn.
 National Grille & Register Co., Cleveland, O.
 Radiant-Aire Corp., Michigan City, Ind.
 Rock Island Register Co., Rock Island, Ill.
 Smith Co., J. B., Philadelphia, Pa.
 Standard Stamping & Perforating Co., Chicago, Ill.
 Titus Mfg. Corp., Waterloo, Ia.
 United States Register Co., Battle Creek, Mich.
 Universal Diffuser Corp., New York, N. Y.
 Waterloo Register Co., Inc., Waterloo, Ia.

DIVERTERS, DRAFT, GAS HEATER

Acme Mfg. Co., Philadelphia, Pa.
 Adelta Mfg. Co., Inc., Philadelphia, Pa.
 Armstrong Fittings Co., Des Moines, Ia.
 Banner Burner Co., Youngstown, Ohio.
 Berger Furnace Corp., Belle Vernon, Pa.
 Buckeye Furnace Pipe Co., Columbus, Ohio.
 Champion Furnace Pipe Co., Peoria, Ill.
 Cleveland Heater Co., Cleveland, Ohio.
 Corbman Bros., Inc., Philadelphia, Pa.
 Excelsior Steel Furnace Co., Chicago, Ill.
 Famous Furnace Co., Cleveland, Ohio.
 Finger, Joe, Cleveland, Ohio.
 Fulton Steelcraft Co., Swanton, O.
 Hotstream Heater Co., Cleveland, Ohio.
 Inland Steel Products Co., Milwaukee, Wis.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Mirror Patented Stove Pipe Co., Hartford, Conn.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Tri-State Heating Supply, Inc., Fort Wayne, Ind.
 Waverly Heating Supply Co., Boston, Mass.
 Wilder Mfg. Co., Niles, Ohio.
 Wilder Products Co., Springfield, Ohio.
 Williamson Co., The, Cincinnati, O.

DOORS, CLEANOUT

Adams Co., The, Dubuque, Ia.
 Inland Steel Products Co., Milwaukee, Wis.
 Majestic Co., Inc., Huntington, Ind.
 Wilder Products Co., Springfield, O.

DOORS, SAFETY, FOR FURNACES

Falz Mfg. Co., St. Paul, Minn.
 Leisur-Maid Mfg. Corp., Grand Rapids, Mich.
 Liberty Combustion Corp., Syracuse, N. Y.

DOUBLE SEAMING ROOFING MACHINES

See Machines, Sheet Metal Working, Double Seaming, Roof

DOWNSPOUTING AND FITTINGS

See Pipe and Fittings, Conductor

DRAFT BOOSTERS

See Boosters, Draft, Mechanical

DRAFT DIVERTERS, GAS HEATER

See Diverters, Draft

DRAFT GAGES

See Gages, Draft

DRAFT INDUCERS

See Boosters, Draft, Mechanical

DRAFT REGULATORS

See Regulators, Furnace Draft, Mechanical; Dampers, Draft, Barometric; Controls, Motors, Draft Damper

DRILLS, ELECTRIC AND PNEUMATIC, PORTABLE

Air-Speed Tool Co., Los Angeles, Calif. (Pneumatic)
Albertson & Co., Inc., Sioux City, Iowa.
Black & Decker Mfg. Co., Towson, Md. (Electric, Portable)
Buffalo Forge Co., Buffalo, N. Y.
Chicago Pneumatic Tool Co., New York, N. Y.
Delta Power Tool Div., Rockwell Mfg. Co., Pittsburgh, Pa. (Electric)
Ingersoll-Rand Co., New York, N. Y. (Pneumatic)
Keller Tool Div., Gardner-Denver Co., Grand Haven, Mich. (Pneumatic)
Mall Tool Co., Chicago, Ill. (Electric)
Millers Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis. (Elec.)
Oster Mfg. Co., John, Milwaukee, Wis. (Electric)
Portable Electric Tools, Inc., Chicago, Ill. (Electric & pneumatic)
Porter-Cable Machine Co., Syracuse, N. Y. (Electric)
Rotor Tool Co., Cleveland, Ohio. (Pneumatic & electric)
Skil Corporation, Chicago, Ill. (Electric & pneumatic)
Small Motors, Inc., Chicago, Ill. (Electric)
Snap-on Tools Corp., Kenosha, Wis. (Electric)
Speedway Mfg. Co., Div. of Thor Power Tool Co., Chicago, Ill.
Stanley Electric Tool Div., Stanley Works, New Britain, Conn. (Electric)
Stow Mfg. Co., Binghamton, N. Y. (Electric-flexible shaft)
Syntrol Co., Homer City, Pa. (Electric)
Thor Power Tool Co., Aurora, Ill. (Electric & Pneumatic)
Wodack Electric Tool Corp., Chicago, Ill. (Electric)

DRIVE CLEATS

See Connectors, Metal

DRYERS, FURNACE TYPE

Campbell Heating Co., Des Moines, Iowa.
Jackson & Church Co., Saginaw, Mich.
Link-Belt Co., Chicago, Ill.
Siebring Mfg. Co., George, Ia.

DUCT ACCESSORIES

Angles, Boots, Heads, Joints, Offsets, Tees, etc.

Acer & Whedon, Inc., Medina, N. Y.
Acme Furnace Fitting Co., Chicago, Ill.
Acme Mfg. Co., Philadelphia, Pa.
Adelta Mfg. Co., Inc., Philadelphia, Pa.
Aireflo Furnace Pipe Co., Brighton, Mich.
Air Supplies Inc., South Norwalk, Conn.
Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
American Metal Products, Los Angeles, Calif.
Armstrong Fittings Co., Des Moines, Ia.
Ashburn Supply Co., Culver City, Calif.
Beckett & Co., Thomas, Dallas, Texas.
Berger Furnace Corp., Belle Vernon, Pa.
Bergstrom Mfg. Corp., Neenah, Wis.
Bieler & Son, Long Island City, N. Y. (Adjustable elbows)
Buckeye Furnace Pipe Co., Columbus, Ohio.
Champion Furnace Pipe Co., Peoria, Ill.
Char-Gale Mfg. Co., Anoka, Minn.
Cincinnati Stamping & Furnace Co., Cincinnati, Ohio.
Clayton & Lambert Mfg. Co., Louisville, Ky.
Coleman Co., Inc., Wichita, Kans.
Corbman Bros., Inc., Philadelphia, Pa.
Crane Co., Chicago, Ill.
Detroit Safety Furnace Pipe Co., Detroit, Mich.
Duc-Pac Div., Sweet Bros., Springfield, Mass.
Eisbach, Albert N., Dubuque, Iowa. (Elbows)
Enderle Inc., Ltd., Frank X., Los Angeles, Calif.
Excelsior Steel Furnace Co., Chicago, Ill.
Felter Co., John, Modern Metals Div., Houston, Tex.

Gary Steel Products Co., Gary, Ind.
Green Colonial Furnace Co., Des Moines, Iowa.
Heil Process Equipment Corp., Cleveland, O.
Henry Furnace Co., Medina, Ohio.
Home Furnace Co., Holland, Mich.
Howes-Woods Co., Cambridge, Mass.
Hugert Mfg. Co., Medina, Ohio.
Inland Steel Products Co., Milwaukee, Wis.
International Heater Co., Utica, N. Y.
J & J Sheet Metal Co., Van Dyke, Mich. (Elbows)
Jettroaire, Inc., Pittsburgh, Pa.
Juniper Elbow Co., Inc., Middle Village, L. I., N. Y.
Keith Furnace Co., Des Moines, Iowa.
La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis. (Elbows)

Lennox Industries, Inc., Marshalltown, Iowa.
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Lyman Co., H. B., Southampton, Mass.
Lyon, Conklin & Co., Inc., Baltimore, Md.
Made-Rite Co., Inc., Newport, Ky.
Majestic Co., Inc., Huntington, Ind.
Marshall Furnace Co., Marshall, Mich.
Metal Fabricators, Inc., Charlotte, N. C.
Metalmen, Inc., Chicago, Ill.
Meyer & Bro. Co., F. Peoria, Ill.
Moncrief Furnace Co., Atlanta, Ga.
Montag Inc., Portland, Ore.
Mueller Climatrol, Milwaukee, Wis.
Northwest Metal Products, Inc., Seattle, Wash.
Norwalk Air Conditioning Corp., South Norwalk, Conn.
Ohio Valley Hardware Co., Inc., Evansville, Ind.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Penn Supply & Metal Corp., Philadelphia, Pa.
Perfection Furnace Pipe Co., Toledo, Ohio.
Premier Furnace Co., Dowagiac, Mich.
Quality Heating Supply Co., Cincinnati, O.
Ralph Mfg. Co., Inc., Wadsworth, Ohio.
Reeves Steel & Mfg. Co., Dover, Ohio.
Roofing & Supply Co., Chattanooga, Tenn.
Round Oak Co., Inc., Dowagiac, Mich.
St. Clair Metal Products Co., Cleveland, O.
Schechter Bros. Co., Philadelphia, Pa.
Sioux Steel Co., Sioux Falls, S. D.
Snappy Inc., Detroit Lakes, Minn.
Southern Iron Co., E. E., St. Louis, Mo.
Standard Furnace Supply Co., Ltd., Omaha, Nebr.
Stratton & Terstegge Co., Louisville, Ky.
Superior Metal Fabricating Co., Niles, O.
Superior Products Co., Omaha, Nebr.
Superior Safety Furnace Pipe Co., Detroit, Mich.
Tri-State Heating Supply, Inc., Fort Wayne, Ind.
United States Register Co., Battle Creek, Mich. (Elbows & angles)
Viking Mfg. Corp., Cleveland, O.
Waverly Heating Supply Co., Boston, Mass.
Wheeling Corrugating Co., Wheeling, W. Va.
Wheelock Co., Geo. F., Birmingham, Ala.
Wildner Products Co., Springfield, Ohio.
Williamson Co., The, Cincinnati, Ohio.
Youngstown Furnace Co., Youngstown, Ohio.

DUCT ANCHORS

See Anchors, Duct and Pipe

DUCT FITTING HARDWARE

See Hardware, Duct Fitting

DUCT, FLEXIBLE

American Metal Hose Div., American Brass Co., Waterbury, Conn.
Flexaust Co., The, New York, N. Y.
Flexible Tubing Corp., Guilford, Conn.
Flexonics Corp., Maywood, Ill.
Wiremold Co., Hartford, Conn.

DUCT FORMING MACHINES

See Machines, Sheet Metal Working, Grooving

DUCT INSULATION

See Insulation, Duct

DUCT, PREFABRICATED, METAL

Acer & Whedon, Inc., Medina, N. Y.
Acme Mfg. Co., Philadelphia, Pa.
Acme Steel Co., Chicago, Ill. (Flexible)
Adelta Mfg. Co., Inc., Philadelphia, Pa.

Aireflo Furnace Pipe Co., Brighton, Mich.
 Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
 Armstrong Fittings Co., Des Moines, Ia.
 Beckett & Co., Thomas, Dallas, Texas.
 Berger Furnace Corp., Belle Vernon, Pa.
 Buckeye Furnace Pipe Co., Columbus, Ohio.
 Champion Furnace Pipe Co., Peoria, Ill.
 Chandler Co., Cedar Rapids, Iowa.
 Char-Gale Mfg. Co., Anoka, Minn.
 Clayton & Lambert Mfg. Co., Louisville, Ky.
 Coleman Co., Inc., Wichita, Kans.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Corbman Bros., Inc., Philadelphia, Pa.
 Cross & Currier Mfg. Co., Inc., Claremont, N. H.
 Detroit Safety Furnace Pipe Co., Detroit, Mich.
 Duc-Pac Div., Swett Bros., Springfield, Mass.
 Enderle, Inc., Ltd., Frank X., Los Angeles, Calif.
 Excelsior Steel Furnace Co., Chicago, Ill.
 Felter Co., John, Modern Metals Div., Houston, Tex.
 Flexonics Corp., Chicago, Ill.
 Gary Steel Products Corp., Gary, Ind.
 General Automatic Products Corp., Baltimore, Md.
 Grand Island Furnace & Supply Co., Grand Island, Nebr.
 Gray Metal Products, Inc., Rochester, N. Y.
 Henry Furnace Co., Medina, Ohio.
 Howes-Woods Co., Cambridge, Mass.
 Hugert Mfg. Co., Medina, O.
 Inland Steel Products Co., Milwaukee, Wis.
 International Heater Co., Utica, N. Y.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Jetronaire, Inc., Pittsburgh, Pa.
 Keith Furnace Co., Des Moines, Iowa.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Lumm Co., A. H., Toledo, O.
 Made-Rite Co., Inc., Newport, Ky.
 Majestic Co., Inc., Huntington, Ind.
 Metal Fabricators, Inc., Charlotte, N. C.
 Metalmen, Inc., Chicago, Ill.
 Meyer & Bro. Co., F., Peoria, Ill.
 Moncrief Furnace Co., Atlanta, Ga.
 Montag Inc., Portland, Ore.
 Mueller Climatrol, Milwaukee, Wis.
 Northwest Metal Products, Inc., Seattle, Wash.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Ohio Valley Hardware Co., Inc., Evansville, Ind.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Furnace Pipe Co., Toledo, Ohio.
 Ralph Manufacturing Co., Inc., Wadsworth, Ohio.
 Reeves Steel & Mfg. Co., Dover, O.
 Round Oak Co., Inc., Dowagiac, Mich.
 St. Clair Metal Products Co., Cleveland, O.
 Schecter Bros. Co., Philadelphia, Pa.
 Sioux Steel Co., Sioux Falls, S. D.
 Standard Furnace Supply Co., Ltd., Omaha, Nebr.
 Stratton & Terstegge Co., Inc., Louisville, Ky.
 Superior Metal Fabricating Co., Niles, O.
 Superior Safety Furnace Pipe Co., Detroit, Mich.
 Thor Metal Products Co., Inc., Syracuse, N. Y.
 Tri-State Heating Supply, Inc., Fort Wayne, Ind.
 United States Register Co., Battle Creek, Mich.
 Viking Mfg. Corp., Cleveland, Ohio.
 Williamson Co., The, Cincinnati, Ohio.
 Youngstown Furnace Co., Youngstown, Ohio.

DUCT, PREFABRICATED, NON-METALLIC

Airfloor of America, South Gate, Calif.
 American Agile Corp., Bedford, Ohio. (Plastic)
 Aqua-Therm, Inc., Dayton, O.
 Cannelton Sewer Pipe Co., RadianTile Div., Cannelton, Ind. (clay)
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Colonial Plastics Mfg. Co., Subsidiary Van Dorn Iron Works Co., Cleveland, O. (Polyvinyl chloride)
 Flexible Tubing Corp., Guilford, Conn. (Fabric)
 Harvey-Whipple, Inc., Springfield, Mass.
 Havg Corp., Newark, Del. (Plastic)
 Heil Process Equipment Corp., Cleveland, O.
 Industrial Plastic Fabricators, Inc., Norwood, Mass.
 International Oil Burner Co., St. Louis, Mo. (Fiber)
 Johns-Manville, New York, N. Y.
 Lumm Co., A. H., Toledo, Ohio. (Asbestos cement board)
 Monsanto Chemical Co., St. Louis, Mo.
 Owens-Corning Fiberglass Corp., Toledo, O.
 Price Bros., Flexicore Div., Dayton, Ohio. (Concrete)

Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, O.
 Round Tube and Cores Co., Chicago, Ill. (Fiber)
 S & C Mfg. Co., Cincinnati, O. (Plastic)
 Sonoco Products Co., Construction Products Div., Hartsville, S. C. (Fiber)
 Straitsville Brick Co., New Straitsville, O.
 United States Rubber Co., New York, N. Y.
 Van Dorn Iron Works, Cleveland, O. (Plastic)

DUCT ROLLING MACHINES

See Machines, Sheet Metal Working, Slip Roll Forming

DUST TURNING VANES

See Vanes, Dust Turning

DUST COLLECTORS

See Collectors, Blow Pipe

EAVES TROUGH AND FITTINGS

See Gutters; Gutter Accessories

ELBOW MACHINES

See Machines, Elbow

ELECTRIC AIR FILTERS

See Cleaners, Air, Electrical

ELECTRIC MOTORS

See Motors, Electric

ELECTRIC WATER HEATERS

See Heaters, Water, Storage Type, Domestic, Electric

ELECTRIC WELDERS

See Welders

ELECTRODES, OIL BURNER

See Burner Parts, Oil

ELECTROSTATIC AIR FILTERS

See Cleaners, Air, Electrical

ENCLOSURES, RADIATOR

Fulton Steelcraft Co., Swanton, O.
 Inland Steel Products Co., Milwaukee, Wis.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Wallace & Gale Co., Baltimore, Md.

EVAPORATIVE COOLER PADS

See Mats, Evaporative Cooler

EVAPORATIVE COOLERS

See Units, Air Conditioning, Central System, Evaporative Type.
 Also Units, Air Conditioning, Room Type, Evaporative

EXCHANGERS, HEAT, REFRIGERANT SUCTION LINE

Brown Fintube Co., The, Elyria, O.
 Doyle & Roth Mfg. Co., Brooklyn, N. Y.
 Gerstein & Copper Co., Inc., South Boston, Mass.
 Heat-X Inc., Brewster, N. Y.
 Kramer Trenton Co., Trenton, N. J.
 Mueller Brass Co., Port Huron, Mich.
 Superior Valve and Fittings Co., Pittsburgh, Pa.
 Techniflex Corp., Port Jervis, N. Y.
 Temprite Products Corp., Birmingham, Mich.
 Wabash Mfg. Co., Chicago, Ill.

EXPANSION BOLTS

See Bolts, Expansion

FACES, RETURN AIR, METAL

A & A Register Co., Cleveland, Ohio.
 A-J Mfg. Co., Kansas City, Mo.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Auer Register Co., Cleveland, Ohio.
 Barber-Colman Co., Rockford, Ill.
 Berger Furnace Corp., Belle Vernon, Pa.
 Char-Gale Mfg. Co., Anoka, Minn.
 Controlair Mfg. Co., Los Angeles, Calif.
 Corbman Bros., Inc., Philadelphia, Pa.
 Diamond Mfg. Co., Wyoming, Pa.

General Register Corp., Cedar Grove, N. J.
 Harrington & King Perforating Co., Chicago, Ill.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Hendrick Mfg. Co., Carbondale, Pa.
 Independent Register Co., Cleveland, Ohio.
 Juniper Elbow Co., Inc., Middle Village, L. I., N. Y.
 Lima Register Co., Lima, Ohio.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Midco Register Corp., St. Paul, Minn.
 Mundt & Sons, Charles, Jersey City, N. J.
 Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
 Rock Island Register Co., Rock Island, Ill.
 Standard Stamping & Perforating Co., Chicago, Ill.
 Stewart Mfg. Co., Cedar Grove, N. J.
 Tuttle & Bailey, Inc., New Britain, Conn.
 United States Register Co., Battle Creek, Mich.
 Viking Mfg. Corp., Cleveland, O.

FAN CONTROLS

See Controls, Fan

FAN HOUSINGS

See Housings, Blower and Fan

FANS, PROPELLER TYPE, AXIAL FLOW

Aerovent Fan Co., Piqua, Ohio.
 Airfan Engineering Co., Los Angeles, Calif.
 American Blower Corp., Detroit, Mich.
 Ammerman Co., C. L., Minneapolis, Minn.
 Bertram Co., Harvey P., Cincinnati, Ohio.
 Blower Application Co., Milwaukee, Wis.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Chicago Blower Corp., Franklin Park, Ill.
 Cook Co., Loren, Berea, Ohio.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 General Blower Co., Morton Grove, Ill.
 Hartzell Propeller Fan Co., Div. Castle Hills Corp., Piqua, Ohio.
 Ilg Electric Ventilating Co., Chicago, Ill.
 Industrial Plastic Fabricators, Inc., Norwood, Mass.
 International Engineering, Inc., Dayton, Ohio.
 Joy Mfg. Co., Pittsburgh, Pa.
 Martin Fan & Blower Co., Chicago, Ill.
 M & E Mfg. Co., Indianapolis, Ind.
 Moore Co., Marceline, Mo.
 Penn Ventilator Co., Philadelphia, Pa.
 Robbins & Myers, Inc., Springfield, Ohio.
 Robinson Ventilating Co., Zelenople, Pa.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 South Bend Air Products, Inc., South Bend, Ind.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Sutton Corp., O. A., Wichita, Kans.
 Vernco Corp., Columbus, Ind.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wind-Way Fan & Ventilator Co., New Orleans, La.
 Wing Mfg. Co., L. J., Linden, N. J.
 Zink Co., John, Tulsa, Okla.

FANS, PROPELLER TYPE, BOOSTER, COLD AIR RETURN

Advance Aluminum Castings Corp., Chicago, Ill.
 Bern's Mfg. Co., Chicago, Ill.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brumme Mfg. Co., Bloomington, Ill.
 Cary Mfg. Co., Waupaca, Wis.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 International Engineering, Inc., Dayton, Ohio.
 Joy Mfg. Co., Pittsburgh, Pa.
 McLarty Systems, Battle Creek, Mich.
 Martin Fan & Blower Co., Chicago, Ill.
 Mauer Engineering, Evanston, Ill.
 Robbins & Myers, Inc., Springfield, Ohio.
 Silent Sioux Corp., Orange City, Iowa.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Western Engineering & Mfg. Co., Venice, Calif.

FANS, PROPELLER TYPE, BOOSTER, ONE-PIPE WARM AIR

Brookside Products Co., Inc., McCordsville, Ind.
 New-Aire Blower Co., Royal Oak, Mich.
 Brumme Mfg. Co., Bloomington, Ill.

Champion Blower & Forge Co., Lancaster, Pa.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 Dual-Air Fan Co., Hampshire, Ill.
 McLarty Systems, Battle Creek, Mich.
 Martin Fan & Blower Co., Chicago, Ill.
 Mauer Engineering, Evanston, Ill.
 Park Heating Specialties, Minneapolis, Minn.
 Robbins & Myers, Inc., Springfield, Ohio.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Victor Electric Products, Inc., Cincinnati, Ohio.
 Western Engineering & Mfg. Co., Venice, Calif.

FANS, PROPELLER TYPE, EXHAUSTERS

Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
 Aerovent Fan Co., Inc., Piqua, O.
 Air Controls, Inc., Cleveland, O.
 Airfan Engineering Co., Los Angeles, Calif.
 Airmaster Corp., Chicago, Ill.
 Allen Cooler & Ventilator, Inc., Rochester, Mich.
 American Blower Corp., Detroit, Mich.
 Ammerman Co., C. L., Minneapolis, Minn.
 Bertram Co., Harvey P., Cincinnati, Ohio.
 Baldor Electric Co., St. Louis, Mo.
 Black Mfg. Co., Harrison, N. J.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 Chicago Blower Corp., Franklin Park, Ill.
 Cirkla Products Div., Folsom Co., Inc., Dallas, Tex.
 Clarage Fan Co., Kalamazoo, Mich.
 Commercialaire, Inc., Brooklyn, N. Y.
 Cook Co., Loren, Berea, Ohio.
 Coppus Engineering Corp., Worcester, Mass.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Diehl Mfg. Co., Somerville, N. J.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Felter Co., John, Modern Metals Div., Houston, Tex.
 Frigid, Inc., Brooklyn, N. Y.
 Gallaher Co., Omaha, Nebr.
 General Blower Co., Morton Grove, Ill.
 Ilg Electric Ventilating Co., Chicago, Ill.
 International Engineering, Inc., Dayton, O.
 Jenn Air Products Co., Indianapolis, Ind.
 Joy Mfg. Co., Pittsburgh, Pa.
 King Co., Owatonna, Minn.
 Kirk & Blum Mfg. Co., Cincinnati, Ohio.
 Kisco Boiler & Engineering Co., St. Louis, Mo.
 Kloppenborg Aluminum Foundry, Davenport, Iowa.
 Martin Fan & Blower Co., Chicago, Ill.
 McLarty Systems, Battle Creek, Mich.
 Moore Co., Marceline, Mo.
 Mountain States Equipment Co., Denver, Colo.
 Muckle Mfg. Co., Owatonna, Minn.
 National Engineering & Mfg. Co., Sedalia, Mo.
 National Gas Equipment Co., Inc., Denison, Texas.
 Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
 Peerless Electric Co., Warren, O.
 Penn Ventilator Co., Philadelphia, Pa.
 Reed Unit-Fans, Inc., New Orleans, La.
 Rich Fan Mfg. Co., Phil, Houston, Tex.
 Robbins & Myers, Inc., Springfield, O.
 Ruemelin Mfg. Co., Milwaukee, Wis.
 Signal Electric Div., King-Seely Corp., Menominee, Mich.
 Sutton Corp., O. A., Wichita, Kans.
 Torit Mfg. Co., St. Paul, Minn.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 Trane Co., The, La Crosse, Wis.
 University Fan & Blower Co., Berkeley, Calif.
 Vernco Corp., Columbus, Ind.
 Western Engineering & Mfg. Co., Venice, Calif.
 West Wind Corp., Seattle, Wash.
 Wind-Way Fan & Ventilator Co., New Orleans, La.
 Wing Mfg. Co., L. J., Linden, N. J.
 Zink Co., John, Tulsa, Okla.

FANS, PROPELLER TYPE, FURNACE

American Blower Corp., Detroit, Mich.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brumme Mfg. Co., Bloomington, Ill.
 Corlett-Turner Co., Chicago, Ill.
 Dana Fan & Blower Corp., Cincinnati, Ohio.

De Bothezat Fan Div., American Machine & Metals, Inc., East Moline, Ill.
 Dual-Air Fan Co., Hampshire, Ill.
 Joy Mfg. Co., Pittsburgh, Pa.
 Martin Fan & Blower Co., Chicago, Ill.
 McLarty Systems, Battle Creek, Mich.
 Peerless Electric Co., Warren, Ohio.

FANS, PROPELLER TYPE, KITCHEN EXHAUST

American Blower Corp., Detroit, Mich.
 Ammerman Co., C. L., Minneapolis, Minn.
 Arex Co., Chicago, Ill.
 Bar-Brook Mfg. Co., Inc., Shreveport, La.
 Bern's Mfg. Co., Chicago, Ill.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Broan Mfg. Co., Inc., Milwaukee, Wis.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 Clavage Fan Co., Kalamazoo, Mich.
 Commercialaire, Inc., Brooklyn, N. Y.
 Cook Co., Loren, Berea, O.
 Crane Co., Chicago, Ill.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 Diehl Mfg. Co., Somerville, N. J.
 Dual-Air Fan Co., Hampshire, Ill.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Emerson Electric Mfg. Co., St. Louis, Mo.
 Fasco Industries, Inc., Rochester, N. Y.
 Frigid, Inc., Brooklyn, N. Y.
 Ilg Electric Ventilating Co., Chicago, Ill.
 Jenn Air Products Co., Indianapolis, Ind.
 Kloppenborg Aluminum Foundry, Davenport, Iowa.
 Kool Air Engineering Co., San Bernardino, Calif.
 Lau Blower Co., Dayton, Ohio.
 Martin Fan & Blower Co., Chicago, Ill.
 Marvin Mfg. Co., Los Angeles, Calif.
 McLarty Systems, Battle Creek, Mich.
 Meyer Mfg. Co., Detroit, Mich.
 Myers Electric Co., Inc., Pittsburgh, Pa.
 Norris-Thermador Corp., Los Angeles, Calif.
 NuTone, Inc., Cincinnati, O.
 Peerless Electric Co., Warren, Ohio.
 Pryne & Co., Inc., Pomona, Calif.
 Signal Electric Div., King-Seely Corp., Menominee, Mich.
 Simpson Co., Oakland, Calif.
 Skinner Heating & Ventilating Co., Inc., St. Louis, Mo.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Stewart Industries, Inc., Indianapolis, Ind.
 Sutton Corp., O. A., Wichita, Kans.
 Trade-Wind Motorfans Inc., Rivera, Calif.
 Universal Blower Co., Birmingham, Mich.
 Ventrola Mfg. Co., Owosso, Mich.
 Vernco Corp., Columbus, Ind.
 West Wind Corp., Seattle, Wash.
 Western Blower Co., Seattle, Wash.
 Wing Mfg. Co., L. J., Linden, N. J.

FANS, PROPELLER TYPE, NIGHT AIR COOLING

Air Controls, Inc., Cleveland, Ohio.
 Air Equipment Co., Inc., Chicago, Ill.
 Airmaster Corp., Chicago, Ill.
 Allen Cooler & Ventilator Inc., Rochester, Mich.
 American Blower Corp., Detroit, Mich.
 American Coolair Corp., Jacksonville, Fla.
 Ammerman Co., C. L., Minneapolis, Minn.
 Arlington Electric Co., St. Louis, Mo.
 Baldor Electric Co., St. Louis, Mo.
 Bar-Brook Mfg. Co., Inc., Shreveport, La.
 Belco Industries, Inc., St. Louis, Mo.
 Belmetals Mfg. Co., Inc., Belmont, Calif.
 Bern's Mfg. Co., Chicago, Ill.
 Biglin Co., Inc., H. C., Atlanta, Ga.
 Bishop & Babcock Mfg. Co., Cleveland, O.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 C & H Air Conditioning Fan Co., Inc., Atlanta, Ga.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 Chicago Blower Corp., Franklin Park, Ill.
 Cirkla Products Div., Folsom Co., Inc., Dallas, Texas.
 Cook Co., Loren, Berea, Ohio.
 Dana Fan & Blower Corp., Cincinnati, Ohio.

Dearborn Stove Co., Dallas, Texas.
 Diehl Mfg. Co., Somerville, N. J.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Dual-Air Fan Co., Hampshire, Ill.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Emerson Electric Mfg. Co., St. Louis, Mo.
 Felter Co., John, Modern Metals Div., Houston, Tex.
 Fresh Air Circulator Co., Houston, Texas.
 Fresh'nd-Aire Co., Div. of Cory Corp., Chicago, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 General Blower Co., Morton Grove, Ill.
 Hunter Fan & Ventilating Co., Memphis, Tenn.
 Ilg Electric Ventilating Co., Chicago, Ill.
 International Oil Burner Co., St. Louis, Mo.
 Jordan & Co., Inc., Paul R., Indianapolis, Ind.
 Kloppenborg Aluminum Foundry, Davenport, Ia.
 Lakewood Engineering & Mfg. Co., Chicago, Ill.
 Lau Blower Co., Dayton, Ohio.
 Martin Fan & Blower Co., Chicago, Ill.
 McGraw Electric Co., Lonergan Mfg. Div., Albion, Mich.
 McLean Engineering Laboratories, Princeton, N. J.
 Meier Electric & Machine Co., Inc., Indianapolis, Ind.
 Murray Co. of Texas, Inc., Dallas, Tex.
 National Engineering & Mfg. Co., Sedalia, Mo.
 National Gas Equipment Co., Inc., Denison, Texas.
 Nelson Products, Herman, American Air Filter Co., Louisville, Ky.
 New York Blower Co., Chicago, Ill.
 NuTone, Inc., Cincinnati, O.
 Palmer Mfg. Corp., Phoenix, Ariz.
 Peerless Electric Co., Warren, Ohio.
 Phelps Mfg. Co., Little Rock, Ark.
 Reed Unit-Fans, Inc., New Orleans, La.
 Rich Fan Mfg. Co., Phil, Houston, Tex.
 Robbins & Myers, Inc., Springfield, Ohio.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 Seco-Lite Mfg. Co., St. Louis, Mo.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Sutton Corp., O. A., Wichita, Kans.
 Victor Electric Products, Inc., Cincinnati, Ohio.
 Viking Air Conditioning Div., National Radiator Co., Cleveland, O.
 Western Blower Co., Seattle, Wash.
 Wind-Way Ventilator Co., New Orleans, La.

FANS, PROPELLER TYPE, VENTILATING SYSTEM

Capacity 4000 cfm up for connection to ductwork

Acme Equipment Co., Muskogee, Okla.
 Aerovent Fan Co., Piqua, Ohio.
 Air Controls, Inc., Cleveland, Ohio.
 Airfan Engineering Co., Los Angeles, Calif.
 Airmaster Corp., Chicago, Ill.
 Allen Cooler & Ventilator Inc., Rochester, Mich.
 Ammerman Co., C. L., Minneapolis, Minn.
 Arex Co., Chicago, Ill.
 Arlington Electric Co., St. Louis, Mo.
 Bar-Brook Mfg. Co., Inc., Shreveport, La.
 Belco Industries, Inc., St. Louis, Mo.
 Bern's Mfg. Co., Chicago, Ill.
 Bertram Co., Harvey P., Cincinnati, Ohio.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Bishop Co., R. H., Champaign, Ill.
 Brookside Products Co., Inc., McCordsville, Ind.
 Buffalo Forge Co., Buffalo, N. Y.
 C & H Air Conditioning Fan Co., Inc., Atlanta, Ga.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 Chicago Blower Corp., Franklin Park, Ill.
 Cirkla Products Div., Folsom Co., Inc., Dallas, Texas.
 Clavage Fan Co., Kalamazoo, Mich.
 Commercialaire, Inc., Brooklyn, N. Y.
 Cook Co., Loren, Berea, O.
 Coppus Engineering Corp., Worcester, Mass.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Diehl Mfg. Co., Somerville, N. J.
 Dual-Air Fan Co., Hampshire, Ill.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Emerson Electric Mfg. Co., St. Louis, Mo.
 Frigid, Inc., Brooklyn, N. Y.
 Fresh'nd-Aire Co., Div. of Cory Corp., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 Hartzell Propeller Fan Co., Div. Castle Hills Corp., Piqua, Ohio.
 Hunter Fan & Ventilating Co., Memphis, Tenn.

Ilg Electric Ventilating Co., Chicago, Ill.
 International Engineering, Inc., Dayton, Ohio.
 International Oil Burner Co., St. Louis, Mo.
 Jordan & Co., Inc., Paul R., Indianapolis, Ind.
 Joy Mfg. Co., Pittsburgh, Pa.
 Kloppenborg Aluminum Foundry, Davenport, Iowa.
 Lakewood Engineering & Mfg. Co., Chicago, Ill.
 Martin Fan & Blower Co., Chicago, Ill.
 M & E Mfg. Co., Indianapolis, Ind.
 Meier Electric & Machine Co., Inc., Indianapolis, Ind.
 Moore Co., Marceline, Mo.
 Mountain States Equipment Co., Denver, Colo.
 Murray Co. of Texas, Inc., Dallas, Texas.
 Myers Electric Co., Inc., Pittsburgh, Pa.
 National Gas Equipment Co., Inc., Denison, Texas.
 Nelson Products, Herman, American Air Filter Co., Louisville, Ky.

New York Blower Co., Chicago, Ill.
 Palmer Mfg. Corp., Phoenix, Ariz.
 Peerless Electric Co., Warren, Ohio.
 Reynolds Electric Co., River Grove, Ill.
 Rich Fan Mfg. Co., Phil, Houston, Tex.
 Robbins & Myers, Inc., Springfield, Ohio.
 Robinson Ventilating Co., Zelienople, Pa.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 Seco-Lite Mfg. Co., St. Louis, Mo.
 Skinner Heating & Ventilating Co., Inc., St. Louis, Mo.
 South Bend Air Products, Inc., South Bend, Ind.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 Trullo Fan Co., Harmony, Pa.
 Uno Ventilator Co., Malden, Mass.
 Western Blower Co., Seattle, Wash.
 Western Engineering & Mfg. Co., Venice, Calif.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 Wind-Way Fan & Ventilator Co., New Orleans, La.
 Wing Mfg. Co., L. J., Linden, N.J.

FASTENINGS, INSULATION

Gerrard & Co., A. J., Melrose Park, Ill.
 Graham Mfg. Corp., Royal Oak, Mich.
 Huck Mfg. Co., Detroit, Mich.
 Johns-Manville, New York, N. Y.
 Moore, Inc., Goodloe, E., Danville, Ill.
 Nelson Stud Welding Div., Gregory Industries, Inc., Lorain, O.
 Stic-Klip Mfg. Co., Inc., Cambridge, Mass.
 Tinnerman Products, Inc., Cleveland, O.

FASTENINGS, SHEET METAL

Allmetal Screw Products Co., Inc., Garden City, N. Y.
 Camloc Fastener Corp., Paramus, N. J.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Cuyahoga Spring Co., Cleveland, Ohio.
 Diamond Expansion Bolt Co., Inc., Garwood, N. J.
 Fabricated Products Co., West Newton, Pa.
 Hexdall Co., A. M., Morris, Ill.
 Inland Steel Products Co., Milwaukee, Wis.
 Lion Fastener Co., Inc., Honeoye Falls, N. Y.
 Shakeproof Div., Illinois Tool Wks., Chicago, Ill.
 Southco Div., South Chester Corp., Lester, Pa.
 Star Expansion Bolt Co., New York, N. Y.
 Star Stainless Screw Co., Paterson, N. J.
 Tinnerman Products, Inc., Cleveland, Ohio.
 United-Carr Fastener Corp., Cambridge, Mass.
 Velocity-Power Tool Co., Pittsburgh, Pa.

FELT, ROOFING

Barber Co., Inc., Philadelphia, Pa.
 Barrett Div. Allied Chemical & Dyce Corp., New York, N. Y.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Celotex Corp., Chicago, Ill.
 Certain-teed Products Corp., Ardmore, Pa.
 Detroit Steel Products Co., Detroit, Mich.
 Flintkote Co., New York, N. Y.
 Globe Roofing Products Co., Inc., Whiting, Ind.
 Johns-Manville, New York, N. Y.
 Koppers Co., Inc., Pittsburgh, Pa.
 Lexsco, Inc., Cleveland, Ohio.
 Meadows, Inc., W. R., Elgin, Ill.
 National Mfg. Corp., Tonawanda, N. Y.
 Ohio Paper Co., Miamisburg, Ohio.
 Owens-Corning Fiberglas Corp., Toledo, Ohio.
 Reilly Tar & Chemical Corp., Indianapolis, Ind.
 Ruberoid Co., New York, N. Y.
 United States Gypsum Co., Chicago, Ill.

FILING MACHINES

See Machines, Sheet Metal Working, Filing

FILTER GAGES

See Gages, Indicating, Filter Resistance

FILTERS, AIR, AUTOMATIC

Air-Maze Corp., Cleveland, O.
 Air & Refrigeration Corp., New York, N. Y.
 Air Stream Filter Corp., St. Louis, Mo.
 American Air Filter Co., Inc., Louisville, Ky.
 Continental Air Filters, Inc., Louisville, Ky.
 Day Co., Minneapolis, Minn.
 Dollinger Corp., Rochester, N. Y.
 Farr Co., Los Angeles, Calif.
 Trion, Inc., McKees Rocks, Pa.

FILTERS, AIR, CLEANABLE

Air Devices, Inc., New York, N. Y. (Steel wire mesh)
 Air & Refrigeration Corp., New York, N. Y. (Fiberglass)
 Air Filter Corp., Milwaukee, Wis. (Wire cloth)
 Air-Maze Corp., Cleveland, Ohio. (Metal wire baffles)
 Air Stream Filter Corp., St. Louis, Mo.
 American Air Filter Co., Inc., Louisville, Ky. (Glass fibers)
 Bard Mfg. Co., Bryan, O. (Aluminum)
 Besser Metal Products Corp., Charlotte, N. C. (Plastic)
 Carey Electronic Engineering Co., Metal Wood Div., Springfield, O.
 Continental Air Filters, Inc., Louisville, Ky. (Steel & aluminum)
 Coppus Engineering Corp., Worcester, Mass. (Felt)
 Dollinger Corp., Rochester, N. Y. (Feltex, Glastex, heat resistant cotton)
 Drico Industrial Corp., Passaic, N. J.
 Evans Corp., George, Moline, Ill. (Aluminum)
 Farr Co., Los Angeles, Calif. (Metal)
 Goodyear Tire & Rubber Co., Akron, Ohio. (Polyethylene)
 Harvey-Hill, Inc., St. Louis, Mo. (Plastic)
 Microtron Corp., Charlotte, N. C. (Plastic)
 Research Products Corp., Madison, Wis. (Metal)
 Smith Filter Corp., Moline, Ill. (Aluminum)
 Somers, Inc., H. J., Detroit, Mich. (Hair & glass)
 Stoddard Industries, Inc., Chicago, Ill. (Woven plastic)
 Trion, Inc., McKees Rocks, Pa. (Aluminum)
 York Corp., York, Pa.

FILTERS, AIR, ELECTRICAL

See Cleaners, Air, Electrical

FILTERS, AIR, ELECTROSTATIC

See Cleaners, Air, Electrical

FILTERS, AIR, GREASE, FOR RANGE HOODS

Air Devices, Inc., New York, N. Y.
 Air Filter Corp., Milwaukee, Wis.
 Air-Maze Corp., Cleveland, Ohio.
 Air Stream Filter Corp., St. Louis, Mo.
 American Air Filter Co., Inc., Louisville, Ky.
 Continental Air Filters, Inc., Louisville 1, Ky.
 Dollinger Corp., Rochester, N. Y.
 Farr Co., Los Angeles, Calif.
 Research Products Corp., Madison, Wis.
 Smith Filter Corp., Moline, Ill.

FILTERS, AIR, THROWAWAY

Air-Maze Corp., Cleveland, O.
 Airgard Mfg. Co., Chicago, Ill.
 Air Stream Filter Corp., St. Louis, Mo.
 American Air Filter Co., Inc., Louisville, Ky.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Barnebey-Cheney Co., Pur Air Div., Columbus, O.
 Bowman Co., Inc., D. F., New Albany, Ind.
 Cambridge Filter Corp., Syracuse, N. Y.
 Drico Industrial Corp., Passaic, N. J.
 Filter Glass Div., Process Development Co., Inc., Genoa, O.
 Filtrix Corp., Corona, N. Y.
 Filt-R-Ite Co., Chicago, Ill.
 Flanders Mill Inc., Riverhead, L. I., N. Y. (For special processes only)
 Harvey, Inc., Sid, Valley Stream, N. Y.
 Lennox Industries, Inc., Marshalltown, Ia.
 Mine Safety Appliance Co., Pittsburgh, Pa. (For special process applications)
 Owens-Corning Fiberglas Corp., Toledo, Ohio.
 Pittsburgh Plate Glass Co., Pittsburgh, Pa.

Research Products Corp., Madison, Wis.
Standard Asbestos Mfg. Co., Chicago, Ill.
Wilson & Co., Inc., Chicago, Ill. (Animal Hair)
York Corp., York, Pa.

FILTERS, AIR, UNIT, RENEWABLE MEDIA

Air Stream Filter Corp., St. Louis, Mo.
American Air Filter Co., Inc., Louisville, Ky.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Annis Air Filter Div., Royal Heaters, Inc., Alhambra, Calif.
Barnebey-Cheney Co., Pur Air Div., Columbus, O.
Cambridge Filter Corp., Syracuse, N. Y.
Chicopee Mills, Inc., New York, N. Y.
Continental Air Filters, Inc., Louisville, Ky.
Dollinger Corp., Rochester, N. Y.
Filtrex Corp., Corona, N. Y.
Filt-R-Ite Co., Chicago, Ill.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Research Products Corp., Madison, Wis.
Trion, Inc., McKees Rocks, Pa.

FILTERS, FUEL OIL

A-P Controls Corp., Milwaukee, Wis.
Air-Maze Corp., Cleveland, O.
Auto-Flo Corp., Detroit, Mich.
Barclay, Inc., Robt., Chicago, Ill.
Burnite Valve Mfg. Corp., Mt. Vernon, N. Y.
Commercial Filters Corp., Melrose, Mass.
Cuno Engineering Corp., Meriden, Conn.
Eclipse Fuel Engineering Co., Rockford, Ill.
Eddington Metal Specialty Co., Eddington, Pa.
Fram Corp., Providence, R. I.
General Filters, Inc., Novi, Mich.
Harvey, Inc., Sid, Valley Stream, N. Y.
Klemm Automotive Products Co., Chicago, Ill.
Kraissl Co., Inc., Hackensack, N. J.
Marquart Mfg. Co., Oakland, Calif.
Morse-Smith-Morse Co., The, Watertown, Mass.
Purulator Products, Inc., Rahway, N. J.
Rega Mfg. Co., Rochester, N. Y.
Sparkler Mfg. Co., Mundelein, Ill.
Standard Aircoil Corp., Newark, N. J.
Tool Industries, Inc., Detroit, Mich.
W.G.B. Oil Clarifier, Inc., Kingston, N. Y.

FILTERS, ODOR

See Adsorbents, Odor

FIRE BRICK

See Refractories

FIREPOTS

See Parts, Repair, Furnace and Stove

FITTINGS, CONDUCTOR

See Pipe and Fittings, Conductor

FITTINGS, COPPER TUBE, COMPRESSION AND FLARED

American Brass Co., Waterbury, Conn.
Anderson Metals Corp., Overland Park, Kans.
Barcafer Mfg. Co., Salina, Kans.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Commonwealth Brass Corp., Detroit, Mich.
Crane Co., Chicago, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Everhot Products Co., Chicago, Ill.
Fisher Brass Foundry, Los Angeles, Calif.
Hays Mfg. Co., Erie, Pa.
Imperial Brass Mfg. Co., Chicago, Ill.
Kerotest Mfg. Co., Pittsburgh, Pa.
Lincoln Brass Works, Detroit, Mich.
Madden Brass Products Co., Aurora, Ill.
Market Forge Co., Everett, Mass.
Mueller Brass Co., Port Huron, Mich.
Mueller Co., Decatur, Ill.
Northern Indiana Brass Co., Elkhart, Ind.
Oil Equipment Mfg. Co., New Haven, Conn.
Parker Appliance Co., Cleveland, Ohio.
Remco, Inc., Zelienople, Pa.
Superior Valve and Fittings Co., Pittsburgh, Pa.
Weatherhead Co., Cleveland, Ohio.
York Corp., York, Pa.

FITTINGS, GUTTER

See Gutter Accessories

FITTINGS, HUMIDIFIER, WATER LINE

American Brass Co., Waterbury, Conn.
Hays Mfg. Co., Erie, Pa.
Imperial Brass Mfg. Co., Chicago, Ill.
Lincoln Brass Works, Detroit, Mich.
Maid-O'-Mist, Inc., Chicago, Ill.
Mueller Brass Co., Port Huron, Mich.
Ross Sprinkler Co., Rosemead, Calif.
Skuttle Mfg. Co., Milford, Mich.

FITTINGS, PIPE

See Pipe and Fittings, Furnace

FLANGING MACHINES

See Machines, Flanging

FLASHINGS, ROOF, PREFABRICATED

Acme Roof Jacket Co., Minneapolis, Minn.
Alpha Metals, Inc., Jersey City, N. J.
American Metal Products, Los Angeles, Calif.
American Sisalkraft Corp., Attleboro, Mass.
American Steel Band Co., Pittsburgh, Pa.
Angier Corp., Framingham, Mass.
Appleton Supply Co., Inc., Appleton, Wis.
Atchison Specialty Mfg. Co., Atchison, Kans.
Berger Mfg. Div., Republic Steel Co., Canton, Ohio.
Ceco Steel Products Corp., Chicago, Ill.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cheney Flashing Co., Trenton, N. J.
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Flemm Lead Co., Inc., Long Island City, N. Y.
Fry Reglet Corp., Bremerton, Wash.
Hussey & Co., C. G., Pittsburgh, Pa.
Inland Steel Products Co., Milwaukee, Wis.
Johns-Manville, New York, N. Y.
Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Keystone Flashing Co., Philadelphia, Pa.
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Meadows, Inc., W. R., Elgin, Ill.
National Lead Co., New York City, N. Y.
New Delphos Mfg. Co., Delphos, Ohio.
Nichols Wire & Aluminum Co., Davenport, Iowa.
Northwest Metal Products, Inc., Seattle, Wash.
Penn Supply & Metal Corp., Philadelphia, Pa.
Perkinson, William J., Chicago, Ill.
Pioneer Sand & Gravel, Seattle, Wash.
Plasteel Products Co., Washington, Pa.
Quaker State Metals Co., Lancaster, Pa.
Reeves Steel & Mfg. Co., Dover, Ohio.
Republic Steel Corp., Cleveland, O.
Revere Copper & Brass Inc., New York, N. Y.
Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
Schoedinger, F. O., Columbus, Ohio.
Simplex Mfg. Co., Fond du Lac, Wis.
Simpson Co., Oakland, Calif.
Vallas, Lionel, Chicago, Ill.
Van Noorden Co., E., Boston, Mass.
Wallace Co., William, Metalbestos Div., Belmont, Calif.
Wheeling Corrugating Co., Wheeling, W. Va.
Wilder Products Co., Springfield, O.

FLASHINGS, THROUGH-WALL, PREFABRICATED

American Brass Co., Waterbury, Conn.
American Sisalkraft Corp., Attleboro, Mass.
American Steel Band Co., Pittsburgh, Pa.
Ceco Steel Products Corp., Chicago, Ill.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cheney Flashing Co., Trenton, N. J.
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Hussey & Co., C. G., Pittsburgh, Pa.
Keystone Flashing Co., Philadelphia, Pa.
Los Angeles Sheet Metal Mfg. Co., Los Angeles, Calif.
New Delphos Mfg. Co., Delphos, Ohio.
Perkinson, William J., Chicago, Ill.
Revere Copper and Brass Inc., New York, N. Y.
Vallas, Lionel, Chicago, Ill.
Van Noorden Co., E., Boston, Mass.
Wasco Products, Inc., Cambridge, Mass.

FLEXIBLE DUCT

See Duct, Flexible

FLOOR REGISTERS

See Diffusers, Air, Floor, also Grilles, Heating,
Ventilating and Air Conditioning

FLUE GAS ANALYZERS

See Analyzers, CO, Portable

FLUX, ACID

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Carajon Chemical Co., Inc., Fremont, Mich.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Klem Chemicals, Inc., Dearborn, Mich.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Neilson Chemical Co., Detroit, Mich.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
Tinit Mfg. Co., Inc., Denver, Colo.
United Wire & Supply Corp., Providence, R. I.
Wolfe-Kote Co., Sheboygan, Wis.

FLUX, ALUMINUM

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
Aluminum Co. of America, Pittsburgh, Pa.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
London Chemical Co., Melrose Park, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.

FLUX, BRASS

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Handy & Harman, New York, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Linde Air Products Co., Div. Union Carbide & Carbon Corp.,
New York, N. Y.
Modern Engineering Co., St. Louis, Mo.
Mueller Brass Co., Port Huron, Mich.
National Cylinder Gas Co., Chicago, Ill.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
Tinit Mfg. Co., Inc., Denver, Colo.

FLUX, CAST IRON

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.

American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Handy & Harman, New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Klem Chemicals, Inc., Dearborn, Mich.
Lenk Mfg. Co., Boston, Mass.
Linde Air Products Co., Div. Union Carbide & Carbon Corp.,
New York, N. Y.
London Chemical Co., Melrose Park, Ill.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
Tinit Mfg. Co., Inc., Denver, Colo.
United Wire & Supply Corp., Providence, R. I.

FLUX, COPPER

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Carajon Chemical Co., Inc., Fremont, Mich.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Handy & Harman, New York, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Industrial Service Laboratories, Milwaukee, Wis.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Kirk & Son, Inc., Morris P., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Lenk Mfg. Co., Boston, Mass.
Mueller Brass Co., Port Huron, Mich.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
Pfanstiehl Chemical Co., Waukegan, Ill.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
Tinit Mfg. Co., Inc., Denver, Colo.

FLUX, GALVANIZED STEEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Carajon Chemical Co., Inc., Fremont, Mich.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Handy & Harman, New York, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Industrial Service Laboratories, Milwaukee, Wis.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Kirk & Son, Inc., Morris P., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Lake Chemical Co., Chicago, Ill.
Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
London Chemical Co., Melrose Park, Ill.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
Pfanstiehl Chemical Co., Waukegan, Ill.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Tinit Mfg. Co., Inc., Denver, Colo.
United Wire & Supply Corp., Providence, R. I.

FLUX, INCONEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Products Corp., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Handy & Harman, New York, N. Y.
International Nickel Co., Inc., New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
National Cylinder Gas Co., Chicago, Ill.
Superior Flux & Mfg. Co., Cleveland, O.

FLUX, LEAD-TIN

Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Chemical Paint Co., Ambler, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Carajon Chemical Co., Inc., Fremont, Mich.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
International Nickel Co., Inc., New York, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Kirk & Son, Inc., Morris P., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Lake Chemical Co., Chicago, Ill.
Lukens Metal Co., Thos. F., Philadelphia, Pa.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
Reiner & Campbell-Co., Inc., Newark, N. J.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
Tinit Mfg. Co., Inc., Denver, Colo.

FLUX, MONEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Products Corp., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Handy & Harman, New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
National Cylinder Gas Co., Chicago, Ill.
Ruby Chemical Co., Columbus, O.
Superior Flux & Mfg. Co., Cleveland, O.
Wolfe-Kote Co., Sheboygan, Wis.

FLUX, NICKEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., Inc., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Products Corp., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Handy & Harman, New York, N. Y.
International Nickel Co., Inc., New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
National Cylinder Gas Co., Chicago, Ill.
Superior Flux & Mfg. Co., Cleveland, O.

FLUX, ROSIN

Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.

Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Lake Chemicals Co., Chicago, Ill.
London Chemical Co., Melrose Park, Ill.
Lukens Metal Co., Thos. F., Philadelphia, Pa.
National Lead Co., New York, N. Y.
Pfanstiehl Chemical Co., Waukegan, Ill.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.
United Wire & Supply Corp., Providence, R. I.

FLUX, SILVER

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Silver Co., Inc., Flushing, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Handy & Harman, New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Lake Chemicals Co., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
National Lead Co., New York, N. Y.
Superior Flux & Mfg. Co., Cleveland, O.

FLUX, STAINLESS STEEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Products Corp., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Arcos Corp., Philadelphia, Pa.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Carajon Chemical Co., Inc., Fremont, Mich.
Division Lead Co., Summit, Ill.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Handy & Harman, New York, N. Y.
Industrial Service Laboratories, Milwaukee, Wis.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Klem Chemicals, Inc., Dearborn, Mich.
Lake Chemicals Co., Chicago, Ill.
Langenkamp Co., F. H., Indianapolis, Ind.
Lenk Mfg. Co., Boston, Mass.
Linde Air Products Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
London Chemical Co., Melrose Park, Ill.
Lukens Metal Co., Thos. F., Philadelphia, Pa.
National Cylinder Gas Co., Chicago, Ill.
National Lead Co., New York, N. Y.
Paul-Lewis Laboratories, Inc., Milwaukee, Wis.
Ruby Chemical Co., Columbus, O.
Superior Flux & Mfg. Co., Cleveland, O.
Wolfe-Kote Co., Sheboygan, Wis.

FLUX, WELDING

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Aluminum Co. of America, Pittsburgh, Pa.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Los Angeles, Calif.
International Nickel Co., Inc., New York, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Lincoln Electric Co., Cleveland, O.
Linde Air Products Co., New York, N. Y.
Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.

Marquette Mfg. Co., Minneapolis, Minn.
 Midland Paint & Varnish Co., Cleveland, Ohio.
 Modern Engineering Co., St. Louis, Mo.
 National Cylinder Gas Co., Chicago, Ill.
 Sight Feed Generator Co., West Alexandria, Ohio.
 Smith Welding Equipment Corp., Minneapolis, Minn.
 Solar Aircraft Co., San Diego, Calif.
 Superior Flux & Mfg. Co., Cleveland, Ohio.
 Tinit Mfg. Co., Inc., Denver, Colo.
 United Wire & Supply Corp., Providence, R. I.
 Victor Equipment Co., San Francisco, Calif.
 Weldit, Inc., Detroit, Mich.

FLUX, ZINC

All-State Welding Alloys Co., Inc., White Plains, N. Y.
 Allen Co., L. B., Chicago, Ill.
 Alpha Metals, Inc., Jersey City, N. J.
 American Solder & Flux Co., Philadelphia, Pa.
 Anchor Metal Co., Inc., Brooklyn, N. Y.
 Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
 Division Lead Co., Summit, Ill.
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
 Glaser Lead Co., Inc., Brooklyn, N. Y.
 Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
 Linde Air Products Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
 National Lead Co., New York, N. Y.
 Superior Flux & Mfg. Co., Cleveland, O.

FOLDERS

See Machines, Sheet Metal Working, Bar Folding

FRAMES, CHIMNEY CAP

Adams Co., The, Dubuque, Ia.
 Levow, David, New York, N. Y.

FUEL OIL FILTERS

See Filters, Fuel Oil

FURNACE BLOWERS

See Blowers; Blower-Filter Units; Blower-Washer Units

FURNACE CEMENT

See Cement, Furnace

FURNACE CLEANERS

See Cleaners, Vacuum, Furnace

FURNACE PIPE

See Pipe and Fittings, Furnace

FURNACE PIPE FITTINGS AND ACCESSORIES

See Pipe and Fittings, Furnace

FURNACE REGULATORS

See Regulators, Furnace Draft, Mechanical; Controls; Control Systems

FURNACE REPAIR PARTS

See Parts, Repair, Furnace and Stove

FURNACES, FORCED WARM AIR, COUNTERFLOW, GAS FIRED, CAST IRON

For Perimeter Heating Systems in Slab or Crawl Space Construction

General Electric Co., Air Conditioning Div., Bloomfield, N. J.

FURNACES, FORCED WARM AIR, COUNTERFLOW, GAS FIRED, STEEL

For Perimeter Heating Systems in Slab or Crawl Space Construction

Advance Furnace Co., Wichita, Kans.
 Agrícola Furnace Co., Inc., Gadsden, Ala.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, O.
 Auburn Burner Co., Auburn, Ind.
 Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
 Bard Mfg. Co., Bryan, O.

Berger Furnace Corp., Belle Vernon, Pa.
 Bonair Products, Inc., Darby, Pa.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Campbell Heating Co., Des Moines, Ia.
 Central States Mfg. Co., Inc., Arkansas City, Kans.
 Century Engineering Corp., Cedar Rapids, Ia.
 Coleman Co., Inc., Wichita, Kans.
 Columbia Burner Co., Toledo, O.
 Columbia Specialty Co., Inc., Chevy Chase, Md.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Crane Co., Chicago, Ill.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Farquhar Furnace Co., Wilmington, O.
 Firewel Co., Inc., Buffalo, N. Y.
 Floral City Heater Co., Monroe, Mich.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 Fraser & Johnston Co., San Francisco, Calif.
 Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
 Green Colonial Furnace Co., Des Moines, Ia.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Heating Equipment Mfg. Co., San Francisco, Calif.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, O.
 Hess Co., The, Chicago, Ill.
 Holly Mfg. Co., Pasadena, Calif.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif.
 Jackson & Church Co., Saginaw, Mich.
 Jetronaire, Inc., Pittsburgh, Pa.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Leeson Air Conditioning Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Majestic Co., Inc., Huntington, Ind.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Meyer Furnace Co., Peoria, Ill.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Norman Products Co., Inc., Columbus, O.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Pacific Gas Heating Co., San Francisco, Calif.
 Patten Co., J. V., Sycamore, Ill.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Premier Furnace Co., Dowagiac, Mich.
 Radiant-Aire Corp., Michigan City, Ind.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Rheem Mfg. Co., Chicago, Ill.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Round Oak Co., Inc., Dowagiac, Mich.
 Royal Jet, Inc., Alhambra, Calif.
 Rybolt Heater Co., Ashland, O.
 Schill Mfg. Co., Crestline, O.
 Sequoia Mfg. Co., San Carlos, Calif.
 Sheet Metal Mfg. Co., Youngstown, O.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Southwest Mfg. Co., Aurora, Mo.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Surface Combustion Corp., Toledo, O.
 Sutton Corp., O. A., Wichita, Kans.
 Synchronic Corp., Watertown, Wis.
 Temco, Inc., Nashville, Tenn.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Tjermund Mfg. Co., St. Paul, Minn.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.

Utility Appliance Corp., Los Angeles, Calif.
 Viking Mfg. Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williamson Co., The, Cincinnati, O.
 York-Shipley, Inc., York, Pa.
 Zink Co., John, Tulsa, Okla.

FURNACES, FORCED WARM AIR, COUNTERFLOW, OIL FIRED, CAST IRON

**For Perimeter Heating Systems in Slab or
Crawl Space Construction**

Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Hess Co., The, Chicago, Ill.

FURNACES, FORCED WARM AIR, COUNTERFLOW, OIL FIRED, STEEL

**For Perimeter Heating Systems in Slab or Crawl Space
Construction**

American Furnace Co., St. Louis, Mo.
 American Ideal-Aire Corp., Garden City, N. Y.
 American Radiator & Standard Sanitary Corp., Air Conditioning
 Div., New York, N. Y.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, O.
 Auburn Burner Co., Auburn, Ind.
 Bard Mfg. Co., Bryan, O.
 Berger Furnace Corp., Belle Vernon, Pa.
 Besser Metal Products Corp., Charlotte, N. C.
 Bonair Products, Inc., Darby, Pa.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Campbell Heating Co., Des Moines, Ia.
 Century Engineering Corp., Cedar Rapids, Ia.
 Certified Furnace Corp., Trenton, N. J.
 Cole Hot Blast Mfg. Co., Chicago, Ill.
 Columbia Specialty Co., Inc., Chevy Chase, Md.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Cox Mfg. Co., Ridgeville, Ind.
 Crane Co., Chicago, Ill.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 DeSoto Oil Burner Corp., York, Pa.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Farquhar Furnace Co., Wilmington, O.
 Firewel Co., Inc., Buffalo, N. Y.
 Floral City Heater Co., Monroe, Mich.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland,
 O.
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 Gilbert & Barker Mfg. Co., West Springfield, Mass.
 Gillen Co., J. L., Detroit, Mich.
 Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
 Green Colonial Furnace Co., Des Moines, Ia.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, O.
 Herco Oil Burner Corp., Lancaster, Pa.
 Home Furnace Co., Holland, Mich.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich.
 International Heater Co., Utica, N. Y.
 International Sales Co., San Francisco, Calif.
 Jackson & Church Co., Saginaw, Mich.
 Jettronaire, Inc., Pittsburgh, Pa.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Leeson Air Conditioning Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Ia.
 Lincoln Furnace Co., Inc., Hawthorne, N. J.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Majestic Co., Inc., Huntington, Ind.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 McPherson Furnace & Supply Co., Portland, Ore.
 Meyer Furnace Co., Peoria, Ill.
 Montag Inc., Portland, Ore.
 Morrison Steel Products, Inc., Buffalo, N. Y.

Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Mortemp Products Corp., Rockville, Md.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Quiet Automatic Burner Corp., Newark, N. J.
 Radiant-Aire Corp., Michigan City, Ind.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Reif-Rexoil, Inc., Buffalo, N. Y.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen,
 N. J.
 Roscoe Mfg. Co., Seattle, Wash.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O.
 Sandberg Mfg. Co., Portland, Ore.
 Schill Mfg. Co., Crestline, O.
 Schwab Furnace Co., Milwaukee, Wis.
 Sheet Metal Mfg. Co., Youngstown, O.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Surface Combustion Corp., Toledo, O.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Springs and Axle Co.,
 Jackson, Mich.
 Tjernlund Mfg. Co., St. Paul, Minn.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Viking Mfg. Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-William Co., Div. of Henney Motor
 Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Pa.
 Zick Sheet Metal Works, Dearborn, Mich.

FURNACES, FORCED WARM AIR, ELECTRIC

Residential only

Electric Heating Products Co., Phoenix, Ariz.
 Electromode Div. of Commercial Controls, Rochester, N. Y.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Heating Assurance, Inc., Spokane, Wash.
 Saffell Air Conditioning Co., Phoenix, Ariz.

FURNACES, FORCED WARM AIR, FLOOR, GAS FIRED

General Air Conditioning Corp., Los Angeles, Calif.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen,
 N. J.

FURNACES, FORCED WARM AIR, FLOOR, OIL FIRED

Kleer-Kleen Mfg. Co., Hayward, Calif.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen,
 N. J.
 Thermo Products, Inc., North Judson, Ind.

FURNACES, FORCED WARM AIR, HIGHBOY, COAL FIRED, STEEL

For Basement or Utility Room Installations

Campbell Heating Co., Des Moines, Ia.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Holly Mfg. Co., Pasadena, Calif.
 Jackson & Church Co., Saginaw, Mich.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Montag Inc., Portland, Ore.
 Olsen Mfg. Co., C. A., Elyria, Ohio.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Round Oak Co., Inc., of Indiana, Dowagiac, Mich.
 Sandberg Mfg. Co., Portland, Ore.
 Souther Iron Co., E. E., St. Louis, Mo.
 Waterman-Waterbury Co., Minneapolis, Minn.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, CAST IRON

For Basement or Utility Room Installations

American Foundry & Furnace Co., Bloomington, Ill.
Bettcher Mfg. Corp., Herbster Furnace Div., Cleveland, O.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Henry Furnace Co., Medina, Ohio.
International Oil Burner Co., St. Louis, Mo.
Mueller Climatrol, Milwaukee, Wis.
Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
Souther Iron Co., E. E., St. Louis, Mo.
Surface Combustion Corp., Toledo, Ohio.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, STEEL

For Basement or Utility Room Installations

Advance Furnace Co., Wichita, Kans.
Agricola Furnace Co., Inc., Gadsden, Ala.
Airtemp Div., Chrysler Corp., Dayton, Ohio.
Airwasher Corp., Eaton Rapids, Mich.
Aladdin Heating Corp., San Leandro, Calif.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Automatic Firing Corp., St. Louis, Mo.
Bard Mfg. Co., Bryan, Ohio.
Berger Furnace Corp., Belle Vernon, Pa.
Bonair Products, Inc., Darby, Pa.
Brandes Co., Madison, Wis.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Campbell Heating Co., Des Moines, Ia.
Central States Mfg. Co., Inc., Arkansas City, Kans.
Century Engineering Corp., Cedar Rapids, Iowa.
Cole Hot Blast Mfg. Co., Chicago, Ill.
Coleman Co., Inc., Wichita, Kans.
Columbia Burner Co., Toledo, O.
Conco Engineering Works, Mendota, Ill.
Connecticut State Furnace Co., Bridgeport, Conn.
Cory Mfg. Co., Greensburg, Pa.
Cox Mfg. Co., Ridgeville, Ind.
Crane Co., Chicago, Ill.
Dalzen Mfg. Co., St. Clair, Mich.
Day & Night Div., Carrier Corp., Monrovia, Calif.
Delco Appliance Div., General Motors Corp., Rochester, N. Y.
Delta Heating Corp., Trenton, N. J.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, Ohio.
Firewel Co., Inc., Buffalo, N. Y.
Floral City Heater Co., Monroe, Mich.
Fluid Heat Div. Anchor Post Products, Inc., Baltimore, Md.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
Fraser & Johnston Co., San Francisco, Calif.
Gilbert & Barker Mfg. Co., West Springfield, Mass.
Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
Green Colonial Furnace Co., Des Moines, Iowa.
Gross-Aire Mfg. Co., St. Louis, Mo.
Hall-Neal Furnace Co., Indianapolis, Ind.
Hammel Radiator Engineering Co., Los Angeles, Calif.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Harvey-Hill, Inc., St. Louis, Mo.
Heating Equipment Mfg. Co., San Francisco, Calif.
Heating Specialties Co., Baltimore, Md.
Heil Co., Milwaukee, Wis.
Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
Henry Furnace Co., Medina, Ohio.
Hess Co., Chicago, Ill.
Hunt Heater Corp., Nashville, Tenn.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
International Heater Co., Utica, N. Y.
International Sales Co., San Francisco, Calif.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Jackson & Church Co., Saginaw, Mich.
Jet-Heat, Inc., Englewood, N. J.
Jettroaire, Inc., Pittsburgh, Pa.
Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
Kaustine Furnace & Tank Corp., Perry, N. Y.
Keith Furnace Co., Des Moines, Ia.
Kleenair Furnace Co., Portland, Ore.
Ko-Z-Aire Products, Inc., Red Oak, Iowa.

Kresky Mfg. Co., Inc., Petaluma, Calif.
Leeson Air Conditioning Corp., Detroit, Mich.
Lennox Industries, Inc., Marshalltown, Iowa.
Lincoln Furnace Co., Inc., Hawthorne, N. J.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Lundt, Inc., Ernest C., Little Falls, N. J.
Majestic Co., Inc., Huntington, Ind.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
McDonald Mfg. Co., A. Y., Dubuque, Ia.
Metro Metal Mfg. Co., Holt, Mich.
Meyer Furnace Co., Peoria, Ill.
Morrison Steel Products, Inc., Buffalo, N. Y.
Mueller Climatrol, Milwaukee, Wis.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, Ohio.
Norwalk Air Conditioning Corp., South Norwalk, Conn.
Olsen Mfg. Co., C. A., Elyria, Ohio.
Oneida Heater Co., Inc., Oneida, N. Y.
Pacific Gas Heating Co., San Francisco, Calif.
Patten Co., J. V., Sycamore, Ill.
Payne Div. of Carrier Corp., Monrovia, Calif.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
Premier Furnace Co., Dowagiac, Mich.
Radiant-Aire Corp., Michigan City, Ind.
Radiation Furnace Corp., Benton Harbor, Mich.
Ralph Mfg. Co., Inc., Wadsworth, O.
Rheem Mfg. Co., Chicago, Ill.
Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
Roberts-Gordon Appliance Co., Buffalo, N. Y.
Round Oak Co., Dowagiac, Mich.
Royal Jet, Inc., Alhambra, Calif.
Rybolt Heater Co., Ashland, Ohio.
Schill Mfg. Co., Crestline, O.
Schwab Furnace Co., Milwaukee, Wis.
Sequoia Mfg. Co., San Carlos, Calif.
Sheet Metal Mfg. Co., Youngstown, O.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Souther Iron Co., E. E., St. Louis, Mo.
Southwest Mfg. Co., Aurora, Mo.
Steel City Furnace Co., Springdale, Pa.
Steel Products Engineering Co., Combustioneer Div., Springfield, O.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Sure Comfort Furnace Co., Forest Park, Ill.
Surface Combustion Corp., Toledo, O.
Sutton Corp., O. A., Wichita, Kans.
Syncromatic Corp., Watertown, Wis.
Temco, Inc., Nashville, Tenn.
Thatcher Furnace Co., Garwood, N. J.
Thermo-Products, Inc., North Judson, Ind.
Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
Tjernlund Mfg. Co., St. Paul, Minn.
Turboheat Div. Cleveland Steel Products Corp., Cleveland, Ohio.
Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
Utility Appliance Corp., Los Angeles, Calif.
Viking Mfg. Co., Cleveland, Ohio.
Waterman-Waterbury Co., Minneapolis, Minn.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
Williams Furnace Co., Buena Park, Calif.
Williamson Co., The, Cincinnati, Ohio.
York-Shipley, Inc., York, Pa.
Zink Co., John, Tulsa, Okla.

FURNACES, FORCED WARM AIR, HIGHBOY, OIL FIRED, STEEL

For Basement or Utility Room Installations

Air Conditioning Engineering Co., Cambridge, Mass.
Airtemp Div., Chrysler Corp., Dayton, Ohio.
Airwasher Corp., Eaton Rapids, Mich.
American Furnace Co., St. Louis, Mo.
American Ideal-Aire Corp., Garden City, N. Y.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Bard Mfg. Co., Bryan, Ohio.
Benner-Nawman, Inc., Oakland, Calif.

Berger Furnace Corp., Belle Vernon, Pa.
 Besser Metal Products Corp., Charlotte, N. C.
 Bonair Products, Inc., Darby, Pa.
 Brandes Co., Madison, Wis.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Campbell Heating Co., Des Moines, Ia.
 Cary Mfg. Co., Waupaca, Wis.
 Century Engineering Corp., Cedar Rapids, Iowa.
 Certified Furnace Corp., Trenton, N. J.
 Cole Hot Blast Mfg. Co., Chicago, Ill.
 Coleman Co., Inc., Wichita, Kans.
 Conco Engineering Works, Mendota, Ill.
 Crane Co., Chicago, Ill.
 Dalzen Mfg. Co., St. Clair, Mich.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 DeSoto Oil Burner Corp., York, Pa.
 Domestic Mfg. Co., Seattle, Wash.
 Dokagiac Steel Furnace Co., Dowagiac, Mich.
 Ducane Heating Corp., Lincoln Park, N. J.
 Engineering Industries Co., Ltd., Toronto, Ont., Canada.
 Enico Products, Detroit, Mich.
 Farquhar Furnace Co., Wilmington, Ohio.
 Firewel Co., Inc., Buffalo, N. Y.
 Floral City Heater Co., Monroe, Mich.
 Fluid Heat Div. Anchor Post Products, Inc., Baltimore, Md.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 Gilbert & Barker Mfg. Co., West Springfield, Mass.
 Gillen Co., J. L., Detroit, Mich.
 Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Harvey-Whipple, Inc., Springfield, Mass.
 Heating Specialties Co., Baltimore, Md.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, Ohio.
 Herco Oil Burner Corp., Lancaster, Pa.
 Hess Co., Chicago, Ill.
 Home Furnace Co., Holland, Mich.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif.
 Iron Fireman Mfg. Co., Cleveland, Ohio.
 Jackson & Church Co., Saginaw, Mich.
 Jet-Heat, Inc., Englewood, N. J.
 Jetronaire, Inc., Pittsburgh, Pa.
 Johnson Co., S. T., Oakland, Calif.
 Johnson Heater Corp., Chelsea, Mass.
 Jungers Stove & Range Co., Grafton, Wis.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Kleenair Furnace Co., Portland, Ore.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Ko-Z-Aire Products, Inc., Red Oak, Iowa.
 Kresky Mfg. Co., Petaluma, Calif.
 Kresno-Stamm Mfg. Co., Palisades Park, N. J.
 Laco Oil Burner Co., Inc., Griswold, Iowa.
 Leeson Air Conditioning Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Lincoln Furnace Co., Inc., Hawthorne, N. J.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Lundt, Inc., Ernest C., Little Falls, N. J.
 Majestic Co., Inc., Huntington, Ind.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McPherson Furnace & Supply Co., Portland, Ore.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Metro Metal Mfg. Co., Holt, Mich.
 Meyer Furnace Co., Peoria, Ill.
 Montag Inc., Portland, Ore.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Northwest Metal Products, Inc., Seattle, Wash.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Olsen Mfg. Co., C. A., Elyria, Ohio.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
 Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
 Pennsylvania Furnace & Iron Co., Warren, Pa.
 Petro Div., Iron Fireman Mfg. Co., Cleveland, Ohio.
 Premier Furnace Co., Dowagiac, Mich.
 Quiet Automatic Burner Corp., Newark, N. J.
 Radiant-Aire Corp., Michigan City, Ind.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Reif-Rexoil, Inc., Buffalo, N. Y.
 Republic Products Co., Philadelphia, Pa.
 Rheem Mfg. Co., Chicago, Ill.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Roscoe Mfg. Co., Seattle, Wash.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Sandberg Mfg. Co., Portland, Ore.
 Schill Mfg. Co., Crestline, O.
 Schwab Furnace Co., Milwaukee, Wis.
 Sheet Metal Mfg. Co., Youngstown, O.
 Silent Glow Oil Burner Co., Hartford, Conn.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Souther Iron Co., E. E., St. Louis, Mo.
 Steel City Furnace Co., Springdale, Pa.
 Steel Products Engineering Co., Combustioneer Div., Springfield, O.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Surface Combustion Corp., Toledo, O.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Tjernlund Mfg. Co., St. Paul, Minn.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, Ohio.
 Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
 Viking Mfg. Corp., Cleveland, Ohio.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Weatherall Engineers, Inc., Providence, R. I.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, Ohio.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Pa.
 Zick Sheet Metal Works, Dearborn, Mich.

FURNACES, FORCED WARM AIR, HIGHBOY, COAL FIRED, STEEL

For Close Clearance (2 in. or under) Installations
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Round Oak Co., Inc., Dowagiac, Mich.
 Waterman-Waterbury Co., Minneapolis, Minn.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, CAST IRON

For Close Clearance (2 in. or under) Installations
 Bettcher Mfg. Corp., Herbstler Furnace Div., Cleveland, O.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, STEEL

For Close Clearance (2 in. or under) Installations
 Airtemp Div., Chrysler Corp., Dayton, O.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Anchor Div. Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, O.
 Automatic Firing Corp., St. Louis, Mo.
 Bard Mfg. Co., Bryan, O.
 Berger Furnace Corp., Belle Vernon, Pa.
 Bonair Products, Inc., Darby, Pa.
 Century Engineering Corp., Cedar Rapids, Ia.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Crane Co., Chicago, Ill.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Dornback Furnace & Foundry Co., Cleveland, O.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Farquhar Furnace Co., Wilmington, O.
 Firewel Co., Inc., Buffalo, N. Y.

Floral City Heater Co., Monroe, Mich.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 Fraser & Johnston Co., San Francisco, Calif.
 Heating Equipment Mfg. Co., San Francisco, Calif.
 Heating Specialties Co., Baltimore, Md.
 Heil Co., Milwaukee, Wis.
 Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
 Henry Furnace Co., Medina, O.
 Hess Co., The, Chicago, Ill.
 Hunt Heater Corp., Nashville, Tenn.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 International Sales Co., San Francisco, Calif.
 Iron Fireman Mfg. Co., Cleveland, O.
 Jackson & Church Co., Saginaw, Mich.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Leeson Air Conditioning Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Majestic Co., Inc., Huntington, Ind.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Meyer Furnace Co., Peoria, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Norman Products Co., Inc., Columbus, O.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Pacific Gas Heating Co., San Francisco, Calif.
 Patten Co., J. V., Sycamore, Ill.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Rasch Mfg. Corp., Kansas City, Mo.
 Rheem Mfg. Co., Chicago, Ill.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Round Oak Co., Inc., Dowagiac, Mich.
 Royal Jet, Inc., Alhambra, Calif.
 Rybolt Heater Co., Ashland, O.
 Ryniker Steel Products Co., Billings, Mont.
 Sequoia Mfg. Co., San Carlos, Calif.
 Southwest Mfg. Co., Aurora, Mo.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Sheet Metal Mfg. Co., Youngstown, O.
 Sutton Corp., O. A., Wichita, Kans.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.

FURNACES, FORCED WARM AIR, HIGHBOY, OIL FIRED, CAST IRON

For Close Clearance (2 in. or under) Installations

Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.

FURNACES, FORCED WARM AIR, HIGHBOY, OIL FIRED, STEEL

For Close Clearance (2 in. or under) Installations

Airtemp Div., Chrysler Corp., Dayton, O.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Anchor Div., Stratton & Terstege Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, O.
 Bard Mfg. Co., Bryan, O.
 Berger Furnace Corp., Belle Vernon, Pa.
 Bonair Products, Inc., Darby, Pa.
 Century Engineering Corp., Cedar Rapids, Ia.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.

Firewel Co., Inc., Buffalo, N. Y.
 Floral City Heater Co., Monroe, Mich.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, O.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 Iron Fireman Mfg. Co., Cleveland, O.
 Jackson & Church Co., Saginaw, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Majestic Co., Inc., Huntington, Ind.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Montag Inc., Portland, Ore.
 Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Rybolt Heater Co., Ashland, O.
 Sandberg Mfg. Co., Portland, Ore.
 Sheet Metal Mfg. Co., Youngstown, O.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Surface Combustion Corp., Toledo, O.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, CAST IRON

For Zero Clearance Installations

Bettcher Mfg. Corp., Herbster Furnace Div., Cleveland, O.

FURNACES, FORCED WARM AIR, HIGHBOY, GAS FIRED, STEEL

For Zero Clearance Installations

Advance Furnace Co., Wichita, Kans.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Armstrong Furnace Co., Columbus, O.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Cenutry Engineering Corp., Cedar Rapids, Ia.
 Coleman Co., Inc., Wichita, Kans.
 Crane Co., Chicago, Ill.
 Day & Night Div., Affiliated Gas Equipment, Inc., Monrovia, Calif.
 Fraser & Johnston Co., San Francisco, Calif.
 Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
 Henry Furnace Co., Medina, O.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif.
 Kilbury Mfg. Co., Lawndale, Calif.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Mission Appliance Corp., Hawthorne, Calif.
 Norman Products Co., Inc., Columbus, O.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Royal Jet, Inc., Alhambra, Calif.
 Ryniker Steel Products Co., Billings, Mont.
 Sequoia Mfg. Co., San Carlos, Calif.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.

Thatcher Furnace Co., Garwood, N. J.
Utility Appliance Corp., Los Angeles, Calif.
Zink Co., John, Tulsa, Okla.

FURNACES, FORCED WARM AIR, HIGHBOY, OIL FIRED, STEEL

For Zero Clearance Installations

American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Century Engineering Corp., Cedar Rapids, Ia.
Coleman Co., Inc., Wichita, Kans.
Henry Furnace Co., Medina, O.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ko-Z-Aire Products, Inc., Red Oak, Ia.
Lennox Industries, Inc., Marshalltown, Ia.
Little Burner Co., Inc., H. C., San Rafael, Calif.
McDonald Mfg. Co., A. Y., Dubuque, Ia.
Olsen Mfg. Co., The C. A., Elyria, O.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Ralph Mfg. Co., Inc., Wadsworth, O.
Thatcher Furnace Co., Garwood, N. J.

FURNACES, FORCED WARM AIR, HORIZONTAL, GAS FIRED, CAST IRON

For Attic, Crawl Space or Suspended Installations

Automatic Gas Equipment Co., Pittsburgh, Pa.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.

FURNACES, FORCED WARM AIR, HORIZONTAL, GAS FIRED, STEEL

For Attic, Crawl Space or Suspended Installations

Advance Furnace Co., Wichita, Kans.
Agricola Furnace Co., Inc., Gadsden, Ala.
Air Conditioning Engineering Co., Cambridge, Mass.
Airwasher Corp., Eaton Rapids, Mich.
Allan Engineering Co., Dallas, Texas.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Bard Mfg. Co., Bryan, O.
Barwick Mfg. Co., Wichita, Kans.
Berger Furnace Corp., Belle Vernon, Pa.
Bonair Products, Inc., Darby, Pa.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Central States Mfg. Co., Inc., Arkansas City, Kans.
Century Engineering Corp., Cedar Rapids, Ia.
Chicago Steel Furnace Co., Chicago, Ill.
Clime-Matic Corp., South Norwalk, Conn.
Coleman Co., Inc., Wichita, Kans.
Columbia Specialty Co., Inc., Chevy Chase, Md.
Cox Mfg. Co., Ridgeville, Ind.
Day & Night Div., Carrier Corp., Monrovia, Calif.
Delco Appliance Div., General Motors Corp., Rochester, N. Y.
Delta Heating Corp., Trenton, N. J.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
Fraser & Johnston Co., San Francisco, Calif.
General Automatic Products Corp., Baltimore, Md.
General Gas Light Co., Kalamazoo, Mich.
Great National Air Conditioning Corp., Oklahoma City, Okla.
Green Colonial Furnace Co., Des Moines, Ia.
Harvey-Hill, Inc., St. Louis, Mo.
Hastings Air Cond. Co., Inc., Hastings, Nebr.
Heil Co., Milwaukee, Wis.
Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
Henry Furnace Co., Medina, Ohio.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
Inland Heater Corp., Minneapolis, Minn.
International Heater Co., Utica, N. Y.
International Sales Co., San Francisco, Calif.
Iron Fireman Mfg. Co., Cleveland, O.
Jackson & Church Co., Saginaw, Mich.
Jet-Heat, Inc., Englewood, N. J.
Johnson Heater Corp., Chelsea, Mass.
Kleer-Kleen Mfg. Co., Hayward, Calif.
Lennox Industries, Inc., Marshalltown, Iowa.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Majestic Co., Inc., Huntington, Ind.
McDonald Mfg. Co., A. Y., Dubuque, Ia.
Metzger Machine & Engineering Co., Milwaukee, Wis.
Meyer Furnace Company, Peoria, Ill.
Morrison Steel Products, Inc., Buffalo, N. Y.

Mueller Climatrol, Milwaukee, Wis.
National Heater Co., St. Paul, Minn.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, Ohio.
Norwalk Air Conditioning Corp., South Norwalk, Conn.
Olsen Mfg. Co., The C. A., Elyria, O.
Oneida Heater Co., Inc., Oneida, N. Y.
Overhead Heaters, Inc., Detroit, Mich.
Patten Co., J. V., Sycamore, Ill.
Payne Div. of Carrier Corp., Monrovia, Calif.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Perfection Industries, Div. of Hupp Corp., Cleveland, O.
Prat-Daniel Corp., South Norwalk, Conn.
Premier Furnace Co., Dowagiac, Mich.
Ralph Mfg. Co., Inc., Wadsworth, O.
Rasch Mfg. Corp., Kansas City, Mo.
Reznor Mfg. Co., Mercer, Pa.
Rheem Mfg. Co., Chicago, Ill.
Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
Round Oak Co., Inc., Dowagiac, Mich.
Royal Jet, Inc., Alhambra, Calif.
Rybolt Heater Co., Ashland, Ohio.
Sequoia Mfg. Co., San Carlos, Calif.
Sheet Metal Mfg. Co., Youngstown, O.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Southwest Mfg. Co., Aurora, Mo.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Surface Combustion Corp., Toledo, Ohio.
Sutton Corp., O. A., Wichita, Kans.
Synromatic Corp., Watertown, Wis.
Temco, Inc., Nashville, Tenn.
Thatcher Furnace Co., Garwood, N. J.
Tjernlund Mfg. Co., St. Paul, Minn.
Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
Universal Products Mfg. Corp., Auburn, Ind.
Utility Appliance Corp., Los Angeles, Calif.
Viking Mfg. Corp., Cleveland, O.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Williamson Co., The, Cincinnati, Ohio.
Zink Co., John, Tulsa, Okla.

FURNACES, FORCED WARM AIR, HORIZONTAL, OIL FIRED, STEEL

For Attic, Crawl Space or Suspended Installations

Air Conditioning Engineering Co., Cambridge, Mass.
Airwasher Corp., Eaton Rapids, Mich.
American Furnace Co., St. Louis, Mo.
American Ideal-Air Corp., Garden City, N. Y.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, O.
Auburn Burner Co., Auburn, Ind.
Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
Bard Mfg. Co., Bryan, O.
Berger Furnace Corp., Belle Vernon, Pa.
Besser Metal Products Corp., Charlotte, N. C.
Bonair Products, Inc., Darby, Pa.
Century Engineering Corp., Cedar Rapids, Ia.
Certified Furnace Corp., Trenton, N. J.
Chicago Steel Furnace Co., Chicago, Ill.
Columbia Specialty Co., Inc., Chevy Chase, Md.
Connecticut State Furnace Co., Bridgeport, Conn.
Cox Mfg. Co., Ridgeville, Ind.
Delco Appliance Div., General Motors Corp., Rochester, N. Y.
Delta Heating Corp., Trenton, N. J.
DeSoto Oil Burner Corp., York, Pa.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, O.
Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
General Automatic Products Corp., Baltimore, Md.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.
Gilbert & Barker Mfg. Co., West Springfield, Mass.
Green Colonial Furnace Co., Des Moines, Ia.
Hall-Neal Furnace Co., Indianapolis, Ind.
Harvey-Whipple, Inc., Springfield, Mass.
Heil Co., Milwaukee, Wis.
Henry Furnace Co., Medina, O.
Herco Oil Burner Corp., Lancaster, Pa.
Hess Co., The, Chicago, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.

Inland Heater Corp., Minneapolis, Minn.
 International Heater Co., Utica, N. Y.
 Iron Fireman Mfg. Co., Cleveland, O.
 Jackson & Church Co., Saginaw, Mich.
 Jet-Heat, Inc., Englewood, N. J.
 Johnson Heater Corp., Chelsea, Mass.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Ko-Z-Aire Products, Inc., Red Oak, Ia.
 Kresno-Stamm Mfg. Co., Palisades Park, N. J.
 Lennox Industries, Inc., Marshalltown, Ia.
 Lincoln Furnace Co., Inc., Hawthorne, N. J.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 McPherson Furnace & Supply Co., Portland, Ore.
 Montag Inc., Portland, Ore.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Mueller Climatrol, Milwaukee, Wis.
 National Heater Co., St. Paul, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Oneida Heater Co., Inc., Oneida, N. Y.
 OverHead Heaters, Inc., Detroit, Mich.
 Patten Co., J. V., Sycamore, Ill.
 Perfection Industries, Div. of Hupp Corp., Cleveland, O.
 Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
 Prat-Daniel Corp., South Norwalk, Conn.
 Quiet Automatic Burner Corp., Newark, N. J.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Reif-Rexoil, Inc., Buffalo, N. Y.
 Rybolt Heater Co., Ashland, O.
 Sandberg Mfg. Co., Portland, Ore.
 Sheet Metal Mfg. Co., Youngstown, O.
 Silent Glow Oil Burner Co., Hartford, Conn.
 Steel Products Engineering Co., Combustioneer Div., Springfield, O.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Synchromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Thermo-Products, Inc., North Judson, Ind.
 Tjernlund Mfg. Co., St. Paul, Minn.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
 Universal Products Mfg. Corp., Auburn, Ind.
 Viking Mfg. Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Ft. Wayne, Ind.
 Weatherall Engineers, Inc., Providence, R. I.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Pa.

FURNACES, FORCED WARM AIR, LOWBOY, COAL FIRED, CAST IRON

For Basement Installations

American Foundry & Furnace Co., Bloomington, Ill.
 Crane Co., Chicago, Ill.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Home Furnace Co., Holland, Mich.
 Keith Furnace Co., Des Moines, Iowa.
 Majestic Co., Inc., Huntington, Ind.
 Montag Inc., Portland, Ore.
 Mueller Climatrol, Milwaukee, Wis.
 National Heater Co., St. Paul, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Premier Furnace Co., Dowagiac, Mich.
 Schwab Furnace Co., Milwaukee, Wis.
 Souther Iron Co., E. E., St. Louis, Mo.
 Spear Stove & Heater Co., James, Philadelphia, Pa.
 Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
 XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, FORCED WARM AIR, LOWBOY, COAL FIRED, STEEL

For Basement Installations

American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning

Div., New York, N. Y.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, Ohio.
 Bard Mfg. Co., Bryan, Ohio.
 Beck Engineering Combustion Kompany, St. Louis, Mo.
 Berger Furnace Corp., Belle Vernon, Pa.
 Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Iowa.
 Coal-O-Matic Co., Trucksville, Pa.
 Crane Co., Chicago, Ill.
 Daniels Mfg. Co., Inc., Sam, Hardwick, Vt.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Eddy Stoker Corp., Wheeling, Ill.
 Electric Furnace-Man, Inc., Emmaus, Pa.
 Farquhar Furnace Co., Wilmington, Ohio.
 Floral City Heater Co., Monroe, Mich.
 Furblo Co., Hermansville, Mich.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hart & Crouse Corp., Oneida, N. Y.
 Henry Furnace Co., Medina, Ohio.
 Hershey Machine & Foundry Co., Manheim, Pa.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 Iron Fireman Mfg. Co., Cleveland, Ohio.
 Jackson & Church Co., Saginaw, Mich.
 Johnson Heater Corp., Chelsea, Mass.
 Keith Furnace Co., Des Moines, Iowa.
 Kleenair Furnace Co., Portland, Ore.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Majestic Co., Inc., Huntington, Ind.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Meyer Furnace Co., Peoria, Ill.
 Montag Inc., Portland, Ore.
 Mueller Climatrol, Milwaukee, Wis.
 National Heater Co., St. Paul, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Olsen Mfg. Co., C. A., Elyria, Ohio.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Premier Furnace Co., Dowagiac, Mich.
 Premium Coal & Oil Co., Cincinnati, Ohio.
 Rosebraugh Co., W. W., Salem, Ore.
 Round Oak Co., Inc., of Ind., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Sandberg Mfg. Co., Portland, Ore.
 Schill Mfg. Co., Crestline, Ohio.
 Souther Iron Co., E. E., St. Louis, Mo.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Synchromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, Ohio.
 Viking Mfg. Corp., Cleveland, Ohio.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Williamson Co., The, Cincinnati, Ohio.
 Worsham Co., Inc., University City, Mo.

FURNACES, FORCED WARM AIR, LOWBOY, GAS FIRED, CAST IRON

For Basement Installations

American Foundry & Furnace Co., Bloomington, Ill.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Beck Engineering Combustion Kompany, St. Louis, Mo.
 Bettcher Mfg. Corp., Herbst Furnace Div., Cleveland, O.
 Crane Co., Chicago, Ill.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Pennsylvania Furnace & Iron Co., Warren, Pa.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Rybolt Heater Co., Ashland, Ohio.
 Schwab Furnace Co., Milwaukee, Wis.
 Sheet Metal Mfg. Co., Youngstown, O.
 Souther Iron Co., E. E., St. Louis, Mo.
 Thatcher Furnace Co., Garwood, N. J.
 XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, FORCED WARM AIR, LOWBOY, GAS FIRED, STEEL

For Basement Installations

Airtemp Div., Chrysler Corp., Dayton, Ohio.
Airwasher Corp., Eaton Rapids, Mich.
Aladdin Heating Corp., San Leandro, Calif.
Allan Engineering Co., Dallas, Texas.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Auburn Foundry, Inc., Stoker, Div., Auburn, Ind.
Autogas Co., Bellwood, Ill.
Automatic Firing Corp., St. Louis, Mo.
Bard Mfg. Co., Bryan, Ohio.
Beck Engineering Combustion Company, St. Louis, Mo.
Berger Furnace Corp., Belle Vernon, Pa.
Bonair Products, Inc., Darby, Pa.
Brandes Co., Madison, Wis.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Campbell Co., E. K., Kansas City, Mo.
Campbell Heating Co., Des Moines, Iowa.
Century Engineering Corp., Cedar Rapids, Iowa.
Cole Hot Blast Mfg. Co., Chicago, Ill.
Coleman Co., Inc., Wichita, Kans.
Columbia Burner Co., Toledo, O.
Columbia Specialty Co., Inc., Chevy Chase, Md.
Conco Engineering Works, Mendota, Ill.
Dalzen Mfg. Co., St. Clair, Mich.
Delco Appliance Div., General Motors Corp., Rochester, N. Y.
Delta Heating Corp., Trenton, N. J.
Dornback Furnace & Foundry Co., Cleveland, Ohio.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Dualtron Co., Pittsburgh, Pa.
Empire Stove Co., Belleville, Ill.
Farquhar Furnace Co., Wilmington, Ohio.
Firewel Co., Inc., Buffalo, N. Y.
Floral City Heater Co., Monroe, Mich.
Fluid Heat Div. Anchor Post Products, Inc., Baltimore, Md.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
Fraser and Johnston Co., Div. Liberty Foundry Co., San Francisco, Calif.
General Automatic Products Corp., Baltimore, Md.
Gillen Co., J. L., Detroit, Mich.
Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
Green Colonial Furnace Co., Des Moines, Iowa.
Gross-Aire Mfg. Co., St. Louis, Mo.
Hall-Neal Furnace Co., Indianapolis, Ind.
Hart & Crouse Corp., Oneida, N. Y.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Harvey-Hill, Inc., St. Louis, Mo.
Heating Specialties Co., Baltimore, Md. (Stainless)
Heil Co., Milwaukee, Wis.
Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
Henry Furnace Co., Medina, Ohio.
Hess Co., Chicago, Ill.
Hunt Heater Corp., Nashville, Tenn.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
International Heater Co., Utica, N. Y.
International Oil Burner Co., St. Louis, Mo.
International Sales Co., San Francisco, Calif.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Jackson & Church Co., Saginaw, Mich.
Jet-Heat, Inc., Englewood, N. J.
Jetronaire, Inc., Pittsburgh, Pa.
Johnson Heater Corp., Chelsea, Mass.
Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
Kaustine Furnace & Tank Corp., Perry, N. Y.
Keith Furnace Co., Des Moines, Iowa.
Kleenair Furnace Co., Portland, Ore.
Ko-Z-Aire Products, Inc., Red Oak, Iowa.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Leeson Air Conditioning Corp., Detroit, Mich.
Lennox Industries Inc., Marshalltown, Iowa.
Lincoln Furnace Co., Inc., Hawthorne, N. J.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Lundt, Inc., Ernest C., Little Falls, N. J.
Majestic Co., Inc., Huntington, Ind.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
McDonald Mfg. Co., A. Y., Dubuque, Ia.
Metro Metal Mfg. Co., Holt, Mich.
Metzger Machine & Engineering Co., Milwaukee, Wis.

Meyer Furnace Co., Peoria, Ill.
Morrison Steel Products, Inc., Buffalo, N. Y.
Mueller Climatrol, Milwaukee, Wis.
Mulkey Co., J. F., Detroit, Mich.
National Heater Co., St. Paul, Minn.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, Ohio.
Norwalk Air Conditioning Corp., South Norwalk, Conn.
Olsen Mfg. Co., C. A., Elyria, Ohio.
Oneida Heater Co., Inc., Oneida, N. Y.
Oran Co., Columbus, Ohio.
Pacific Gas Heating Co., San Francisco, Calif.
Patten Co., J. V., Sycamore, Ill.
Payne Div. of Carrier Corp., Monrovia, Calif.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
Petro Div., Iron Fireman Mfg. Co., Cleveland, O.
Premier Furnace Co., Dowagiac, Mich.
Radiant-Aire Corp., Michigan City, Ind.
Radiation Furnace Corp., Benton Harbor, Mich.
Ralph Mfg. Co., Inc., Wadsworth, O.
Rapid Heat Corp., Detroit, Mich.
Rasch Mfg. Corp., Kansas City, Mo.
Rheem Mfg. Co., Chicago, Ill.
Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
Roberts-Gordon Appliance Corp., Buffalo, N. Y.
Round Oak Co., Inc., Dowagiac, Mich.
Royal Jet, Inc., Alhambra, Calif.
Rybolt Heater Co., Ashland, Ohio.
Ryniker Steel Products Co., Billings, Mont.
Schill Mfg. Co., Crestline, Ohio.
Sequoia Mfg. Co., San Carlos, Calif.
Sheet Metal Mfg. Co., Youngstown, O.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Southern Iron Co., E. E., St. Louis, Mo.
Steel City Furnace Co., Springdale, Pa.
Steel Products Engineering Co., Combustioneer Div., Springfield, O.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Sure Comfort Furnace Co., Forest Park, Ill.
Surface Combustion Corp., Toledo, O.
Sutton Corp., O. A., Wichita, Kans.
Syncromatic Corp., Watertown, Wis.
Temco, Inc., Nashville, Tenn.
Thatcher Furnace Co., Garwood, N. J.
Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
Thermo-Products, Inc., North Judson, Ind.
Timkin Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
Tjernlund Mfg. Co., St. Paul, Minn.
Tordihet Div., Cleveland Steel Products Corp., Cleveland, Ohio.
Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
Utility Appliance Corp., Los Angeles, Calif.
Viking Mfg. Corp., Cleveland, Ohio.
Waterman-Waterbury Co., Minneapolis, Minn.
Wayne Home Equipment Co., Fort Wayne, Ind.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
Williamson Co., The, Cincinnati, Ohio.
York-Shipley, Inc., York, Pa.
Zick Sheet Metal Works, Dearborn, Mich.
Zink Co., John, Tulsa, Okla.

FURNACES, FORCED WARM AIR, LOWBOY, OIL FIRED, CAST IRON

For Basement Installations

American Foundry & Furnace Co., Bloomington, Ill.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Keith Furnace Co., Des Moines, Iowa.
Livingston, Inc., Marshall, Mich.
Montag, Inc., Portland, Ore.
Mueller Climatrol, Milwaukee, Wis.
Schwab Furnace Co., Milwaukee, Wis.
Sheet Metal Mfg. Co., Youngstown, O.
XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, FORCED WARM AIR, LOWBOY, OIL FIRED, STEEL

For Basement Installations

Air Conditioning Engineering Co., Cambridge, Mass.
Airtemp Div., Chrysler Corp., Dayton, Ohio.
Airwasher Corp., Eaton Rapids, Mich.

American Furnace Co., St. Louis, Mo.
 American Ideal-Aire Corp., Garden City, N. Y.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Armstrong Furnace Co., Columbus, Ohio.
 Auburn Burner Co., Auburn, Ind.
 Auburn Foundry Inc., Stoker Div., Auburn, Ind.
 Automatic Firing Corp., St. Louis, Mo.
 Bard Mfg. Co., Bryan, Ohio.
 Beck Engineering Combustion Kompany, St. Louis, Mo.
 Berger Furnace Corp., Belle Vernon, Pa.
 Besser Metal Products Corp., Charlotte, N. C.
 Brandes Co., Madison, Wis.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Iowa.
 Cary Mfg. Co., Waupaca, Wis.
 Century Engineering Corp., Cedar Rapids, Iowa.
 Certified Furnace Corp., Trenton, N. J.
 Chicago Steel Furnace Co., Chicago, Ill.
 Coal-O-Matic Co., Trucksville, Pa.
 Cole Hot Blast Mfg. Co., Chicago, Ill.
 Coleman Co., Inc., Wichita, Kans.
 Columbia Specialty Co., Inc., Chevy Chase, Md.
 Conco Engineering Works, Mendota, Ill.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Cory Mfg. Co., Greensburg, Pa.
 Cox Mfg. Co., Ridgeville, Ind.
 Crane Co., Chicago, Ill.
 Dalzen Mfg. Co., St. Clair, Mich.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Delta Heating Corp., Trenton, N. J.
 DeSoto Oil Burner Corp., York, Pa.
 Domestic Mfg. Co., Seattle, Wash.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Dualtron Co., Pittsburgh, Pa. (Equipped with electrostatic filter)
 Ducane Heating Corp., Lincoln Park, N. J.
 Electric Furnace-Man, Inc., Emmaus, Pa.
 Electrol Burner Mfg. Co., Inc., Rutherford, N. J.
 Engineering Industries Co., Ltd., Toronto, Ont., Canada.
 Enico Products, Detroit, Mich.
 Farquhar Furnace Co., Wilmington, O.
 Floral City Heater Co., Monroe, Mich.
 Fluid Heat Div. Anchor Post Products, Inc., Baltimore, Md.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio
 Furblo Co., Hermanville, Mich.
 General Automatic Products Corp., Baltimore, Md.
 General Oil Heating Corp., West New York, N. J.
 Gilbert & Barker Mfg. Co., West Springfield, Mass.
 Gillen Co., J. L., Detroit, Mich.
 Glasby Mfg. Co., Inc., J. P., Belleville, N. J.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Hall-Neal Furnace Co., Indianapolis, Ind.
 Hart & Crouse Corp., Oneida, N. Y.
 Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
 Harvey-Whipple, Inc., Springfield, Mass.
 Heating Specialties Co., Baltimore, Md. (Stainless).
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, Ohio.
 Herco Oil Burner Corp., Lancaster, Pa.
 Hershey Machine & Foundry Co., Manheim, Pa.
 Hess Co., Chicago, Ill.
 Home Furnace Co., Holland, Mich.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif.
 Iron Fireman Mfg. Co., Cleveland, Ohio.
 Jackson & Church Co., Saginaw, Mich.
 Jet-Heat, Inc., Englewood, N. J.
 Jettroaire, Inc., Pittsburgh, Pa.
 Johnson Co., S. T., Oakland, Calif., and Philadelphia, Pa.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Keith Furnace Co., Des Moines, Iowa.
 Kleenair Furnace Co., Portland, Ore.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Ko-Z-Aire Products, Inc., Red Oak, Iowa.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Kresno-Stamm Mfg. Co., Palisades Park, N. J.
 Leeson Air Conditioning Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Lincoln Furnace Co., Inc., Hawthorne, N. J.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Lundt, Inc., Ernest C., Little Falls, N. J.
 Luty Furnace Mfg. Co., Detroit, Mich.
 Majestic Co., Inc., Huntington, Ind.
 Mayflower Air Conditioners, Inc., St. Paul, Minn.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 McKee Furnace Co., Minneapolis, Minn.
 McPherson Furnace & Supply Co., Portland, Ore.
 Metro Metal Mfg. Co., Holt, Mich.
 Meyer Furnace Co., Peoria, Ill.
 Montag Inc., Portland, Ore.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mortemp Div., Mechanical Products Co., Seattle, Wash.
 Mueller Climatrol, Milwaukee, Wis.
 Mulkey Co., J. F., Detroit, Mich.
 National Heater Co., St. Paul, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Norwalk Air Conditioning Corp., South Norwalk, Conn.
 Olsen Mfg. Co., C. A., Elyria, Ohio.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Oran Co., Columbus, O.
 Pacific Gas Heating Co., San Francisco, Calif.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
 Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
 Petro Div., Iron Fireman Mfg. Co., Cleveland, Ohio.
 Prat-Daniel Corp., South Norwalk, Conn.
 Premier Furnace Co., Dowagiac, Mich.
 Premium Coal & Oil Co., Cincinnati, Ohio.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Quick Furnace & Supply Co., Des Moines, Iowa.
 Quiet Automatic Burner Corp., Newark, N. J.
 Radiant-Aire Corp., Michigan City, Ind.
 Radiant Utilities Corp., Brooklyn, N. Y.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Ray Oil Burner Co., San Francisco, Calif.
 Reif-Rexoil, Inc., Buffalo, N. Y.
 Republic Products Co., Philadelphia, Pa.
 Rheem Mfg. Co., Chicago, Ill.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen, N. J.
 Robot Auto Heat Corp., Middletown, Conn.
 Rosebraugh Co., W. W., Salem, Ore.
 Roscoe Mfg. Co., Seattle, Wash.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Sandberg Mfg. Co., Portland, Ore.
 Schill Mfg. Co., Crestline, Ohio.
 Schwab Furnace Co., Milwaukee, Wis.
 Sheet Metal Mfg. Co., Youngstown, O.
 Siebring Mfg. Co., George, Ia.
 Silent Sioux Corp., Orange City, Iowa.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Souther Iron Co., E. E., St. Louis, Mo.
 Standard Heating Equipment Co., Waterloo, Iowa.
 Steel City Furnace Co., Springdale, Pa.
 Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Sundstrand Engineering Co., Rockford, Ill.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Surface Combustion Corp., Toledo, O.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
 Thermo-Products Inc., North Judson, Ind.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Tjernlund Mfg. Co., St. Paul, Minn.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, Ohio
 Tru-Heat Co., Trenton, N. J.
 Turb-O-Tube Furnace, Inc., Buffalo, N. Y.
 United Air Heaters, Inc., Seattle, Wash.
 Viking Mfg. Corp., Cleveland, Ohio.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Weatherall Engineers, Inc., Providence, R. I.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, Ohio.
 Wisconsin Oil Burner Co., Madison, Wis.
 York-Shipley, Inc., York, Pa.
 Zick Sheet Metal Works, Dearborn, Mich.

FURNACES, FORCED WARM AIR, WALL, GAS FIRED

Day & Night Div., Carrier Corp., Monrovia, Calif.
Payne Div. of Carrier Corp., Monrovia, Calif.
Hammel Radiator Engineering Co., Los Angeles, Calif.
International Oil Burner Co., St. Louis, Mo.
Morrison Steel Products, Inc., Buffalo, N. Y.
Ohio Foundry & Mfg. Co., Steubenville, O.
Silent Sioux Corp., Orange City, Ia.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Williams Furnace Co., Buena Park, Calif.

FURNACES, FORCED WARM AIR, WALL, OIL FIRED

Certified Furnace Corp., Trenton, N. J.
International Oil Burner Co., St. Louis, Mo.
Iron Fireman Mfg. Co., Cleveland, O.
Morrison Steel Products, Inc., Buffalo, N.Y.
Perfection Industries, Div. of Hupp Corp., Cleveland, O.
Quincy Stove Mfg. Co., Quincy, Ill.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.

FURNACES, FORCED WARM AIR, WITH CLOTHES DRYER SECTION, GAS FIRED

Bettcher Mfg. Corp., Herbster Furnace Div., Cleveland, O.

FURNACES, FORCED WARM AIR, WITH DOMESTIC HOT WATER SUPPLY, GAS FIRED, STEEL

Aqua-Air Corp., Elmont, L. I., N. Y.
Metromatic Mfg. Co., Medford, Mass.
Robot-Auto Heat Corp., Middletown, Conn.

FURNACES, FORCED WARM AIR, WITH DOMESTIC HOT WATER SUPPLY, OIL FIRED, STEEL

Aqua-Air Corp., Elmont, L. I., N. Y.
Johnson Co., S. T., Oakland, Calif.
Metromatic Mfg. Co., Medford, Mass.
Robot-Auto Heat Corp., Middletown, Conn.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY (DIRECT FIRED, FOR LOCATION IN SPACE TO BE HEATED AND WITHOUT DUCT DISTRIBUTION)

See Heaters, Air

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, COAL FIRED, CAST IRON

Exclusively for Duct Distribution of Air

American Foundry & Furnace Co., Bloomington, Ill.
MaGirl Foundry & Furnace Co., Bloomington, Ill.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, COAL FIRED, STEEL

Exclusively for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.
Armstrong Furnace Co., Columbus, O.
Beck Engineering Combustion Kompany, St. Louis, Mo.
Campbell Heating Co., Des Moines, Ia.
Daniels Mfg. Co., Sam, Hardwick, Vt.
Floral City Heater Co., Monroe, Mich.
Jackson & Church Co., Saginaw, Mich.
Johnson Heater Corp., Chelsea, Mass.
Lennox Industries, Inc., Marshalltown, Ia.
Mammoth Furnace Co., St. Paul, Minn.
Meyer Furnace Co., Peoria, Ill.
National Heater Co., St. Paul, Minn.
Northwest Foundry & Furnace Co., Portland, Ore.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Round Oak Co., Inc., Dowagiac, Mich.
Sandberg Mfg. Co., Portland, Ore.
Syncromatic Corp., Watertown, Wis.
Waterman-Waterbury Co., Minneapolis, Minn.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, GAS FIRED, CAST IRON

Exclusively for Duct Distribution of Air

American Foundry & Furnace Co., Bloomington, Ill.
MaGirl Foundry & Furnace Co., Bloomington, Ill.
Surface Combustion Corp., Toledo, O.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, GAS FIRED, STEEL

Exclusively for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.

Armstrong Furnace Co., Columbus, O.
Auburn Burner Co., Auburn, Ind.
Beck Engineering Combustion Kompany, St. Louis, Mo.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Campbell Co., E. K., Kansas City, Mo.
Campbell Heating Co., Des Moines, Ia.
Chicago Steel Furnace Co., Chicago, Ill.
Illinois Iron & Bolt Co., Carpentersville, Ill.
International Sales Co., San Francisco, Calif.
Jackson & Church Co., Saginaw, Mich.
Johnson Heater Corp., Chelsea, Mass.
Lee Corp., Wilmington, Del.
Lennox Industries, Inc., Marshalltown, Ia.
Majestic Co., Inc., Huntington, Ind.
Mammoth Furnace Co., St. Paul, Minn.
Meyer Furnace Co., Peoria, Ill.
Mueller Climatrol, Milwaukee, Wis.
National Heater Co., St. Paul, Minn.
Olson & Co., Arthur A., Canfield, O.
Patten Co., J. V., Sycamore, Ill.
Peerless Furnace & Foundry Co., Indianapolis, Ind.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Prat-Daniel Corp., South Norwalk, Conn.
Premier Furnace Co., Dowagiac, Mich.
Republic Products Co., Philadelphia, Pa.
Round Oak Co., Dowagiac, Mich.
Syncromatic Corp., Watertown, Wis.
Tjernlund Mfg. Co., St. Paul, Minn.
Waterman-Waterbury Co., Minneapolis, Minn.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, OIL FIRED, CAST IRON

Exclusively for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.
American Foundry & Furnace Co., Bloomington, Ill.
Campbell Co., E. K., Kansas City, Mo.
International Heater Co., Utica, N. Y.
Keith Furnace Co., Des Moines, Ia.
MaGirl Foundry & Furnace Co., Bloomington, Ill.

FURNACES, FORCED WARM AIR, 400,000 BTUH AND UP CAPACITY, OIL FIRED, STEEL

Exclusively for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, O.
Auburn Burner Co., Auburn, Ind.
Bard Mfg. Co., Bryan, O.
Beck Engineering Combustion Kompany, St. Louis, Mo.
Besser Metal Products Corp., Charlotte, N. C.
Campbell Co., E. K., Kansas City, Mo.
Campbell Heating Co., Des Moines, Ia.
Chicago Steel Furnace Co., Chicago, Ill.
Crane Co., Chicago, Ill.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Illinois Iron & Bolt Co., Carpentersville, Ill.
International Sales Co., San Francisco, Calif.
Jackson & Church Co., Saginaw, Mich.
Johnson Heater Corp., Chelsea, Mass.
Keith Furnace Co., Des Moines, Ia.
Lee Corp., Wilmington, Del.
Lennox Industries, Inc., Marshalltown, Ia.
Majestic Co., Inc., Huntington, Ind.
Mammoth Furnace Co., St. Paul, Minn.
McPherson Furnace & Supply Co., Portland, Ore.
Meyer Furnace Co., Peoria, Ill.
Montag Inc., Portland, Ore.
Mueller Climatrol, Milwaukee, Wis.
National Heater Co., St. Paul, Minn.
Northwest Foundry & Furnace Co., Portland, Ore.
Norwalk Air Conditioning Corp., South Norwalk, Conn.
Olson & Co., Arthur A., Canfield, O.
Patten Co., J. V., Sycamore, Ill.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Prat-Daniel Corp., South Norwalk, Conn.
Premier Furnace Co., Dowagiac, Mich.
Quiet Automatic Burner Corp., Newark, N. J.
Rosebraugh Co., W. W., Salem, Ore.
Round Oak Co., Dowagiac, Mich.
Sandberg Mfg. Co., Portland, Ore.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Syncromatic Corp., Watertown, Wis.
Tjernlund Mfg. Co., St. Paul, Minn.
Waterman-Waterbury Co., Minneapolis, Minn.
Weatherall Engineers, Inc., Providence, R. I.

FURNACES, PORTABLE, FOR TEMPORARY HEAT

Air Conditioning Engineering Co., Cambridge, Mass.
Auburn Burner Co., Auburn, Ind.
Bica Co., Girard, O.
Certified Furnace Corp., Trenton, N. J.
Delta Heating Corp., Trenton, N. J.
Fageol Co., R. D., Heat Machine Div., Kent, O.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Lennox Industries, Inc., Marshalltown, Ia.
Master Vibrator Co., Dayton, O.
Mortemp Div., Mechanical Products Co., Seattle, Wash.
National Heater Co., St. Paul, Minn.
Prat-Daniel Corp., South Norwalk, Conn.
Quiet Automatic Burner Corp., Newark, N. J.
Siebring Mfg. Co., George, Ia.
Tjernlund Mfg. Co., St. Paul, Minn.

FURNACES, SOLDERING

Aeroil Products Co., Inc., South Hackensack, N. J.
Bernz Co., Otto, Rochester, N. Y.
Clayton & Lambert Mfg. Co., Louisville, Ky.
Fieser Co., F. J., New York, N. Y.
Goss Gas Inc., Glenshaw, Pa.
Hones, Inc., Charles A., Baldwin, N. Y. (Gas).
Inland Steel Products Co., Milwaukee, Wis.
Insto-Gas Corp., Detroit, Mich. (Gas)
Johnson Gas Appliance Co., Cedar Rapids, Iowa.
Moncrief Lenoir Mfg. Co., Houston, Tex.
Mutual Liquid Gas & Equipment Co., Gardena, Calif.
New Delphos Mfg. Co., Delphos, O. (Charcoal)
Polis Mfg. Co., J. D., Chicago, Ill.
Ransome Co., Emeryville, Calif.
Reiner & Campbell Co., Inc., Newark, N. J.
Reliable Gas Products Co., Cedar Rapids, Iowa.
Sanders, J. A., Fulton, N. Y.
Turner Brass Works, Sycamore, Ill.
Unique Mfg. Co., Inc., Chicago, Ill. (Gasoline, Kerosene).
Vulcan Electric Co., Div. Consolidated Electric Lamp Co., Inc., Danvers, Mass. (Electric)
Weldit, Inc., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.

FURNACES, WARM AIR, GRAVITY, COAL FIRED, CAST IRON

Agricola Furnace Co., Inc., Gadsden, Ala.
American Foundry & Furnace Co., Bloomington, Ill.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Crane Co., Chicago, Ill.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
Green Colonial Furnace Co., Des Moines, Iowa.
Home Furnace Co., Holland, Mich.
Keith Furnace Co., Des Moines, Iowa.
MaGirl Foundry & Furnace Co., Bloomington, Ill.
Montag Inc., Portland, Ore.
National-U. S. Radiator Corp., Johnstown, Pa.
Premier Furnace Co., Dowagiac, Mich.
Schill Mfg. Co., Crestline, Ohio.
Schwab Furnace Co., Milwaukee, Wis.
Souther Iron Co., E. E., St. Louis, Mo.
Spear Stove & Heater Co., James, Philadelphia, Pa.
Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
Thatcher Furnace Co., Garwood, N. J.
Union Mfg. Co., Inc., Boyertown, Pa.
XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, WARM AIR, GRAVITY, COAL FIRED, STEEL

American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Bard Mfg. Co., Bryan, Ohio.
Berger Furnace Corp., Belle Vernon, Pa.
Campbell Heating Co., Des Moines, Iowa.
Crane Co., Chicago, Ill.
Daniels Mfg. Co., Inc., Sam, Hardwick, Vt.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, Ohio.
Floral City Heater Co., Monroe, Mich.
Front Rank Furnace Co., Div. Liberty Foundry Co., St. Louis, Mo.
Furblo Co., Hermansville, Mich.
Gross-Aire Mfg. Co., St. Louis, Mo.

Hall-Neal Furnace Co., Indianapolis, Ind.
Hart & Crouse Corp., Oneida, N. Y.
Henry Furnace Co., Medina, Ohio.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.

International Heater Co., Utica, N. Y.
Jackson & Church Co., Saginaw, Mich.
Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
Keith Furnace Co., Des Moines, Iowa.
Lennox Industries, Inc., Marshalltown, Ia.
Majestic Co., Inc., Huntington, Ind.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
Meyer Furnace Co., Peoria, Ill.
Montag Inc., Portland, Ore.
Mueller Climatrol, Milwaukee, Wis.
National Heater Co., St. Paul, Minn.
National-U. S. Radiator Corp., Johnstown, Pa.
Northwest Foundry & Furnace Co., Portland, Ore.
Olsen Mfg. Co., C. A., Elyria, Ohio.
Oneida Heater Co., Inc., Oneida, N. Y.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Premier Furnace Co., Dowagiac, Mich.
Rosebraugh Co., W. W., Salem, Ore.
Round Oak Co., Inc., of Ind., Dowagiac, Mich.
Rybolt Heater Co., Ashland, Ohio.
Sandberg Mfg. Co., Portland, Ore.
Schill Mfg. Co., Crestline, Ohio.
Schwab Furnace Co., Milwaukee, Wis.
Souther Iron Co., E. E., St. Louis, Mo.
Sure Comfort Furnace Co., Forest Park, Ill.
Synchromatic Corp., Watertown, Wis.
Thatcher Furnace Co., Garwood, N. J.
Toridheat Div., Cleveland Steel Products Corp., Cleveland, Ohio.
Waterman-Waterbury Co., Minneapolis, Minn.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
Williamson Co., The, Cincinnati, Ohio.
Worsham Co., Inc., University City, Mo.

FURNACES, WARM AIR, GRAVITY, ELECTRIC

Heating Assurance, Inc., Spokane, Wash.
Meier Electric & Machine Co., Inc., Indianapolis, Ind.

FURNACES, WARM AIR, GRAVITY, FLOOR, GAS

Advance Furnace Co., Wichita, Kans.
Agricola Furnace Co., Inc., Gadsden, Ala.
Autogas Co., Bellwood, Ill.
Beck Engineering Combustion Kompany, St. Louis, Mo.
Benner-Nawman, Inc., Oakland, Calif.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Central States Mfg. Co., Inc., Arkansas City, Kans.
Coleman Co., Inc., Wichita, Kans.
Fraser & Johnston Co., San Francisco, Calif.
Gross Furnace Mfg. Co., Inc., Salem, Va.
Holly Mfg. Co., Pasadena, Calif.
Hunt Heater Corp., Nashville, Tenn.
International Sales Co., San Francisco, Calif.
Iron Fireman Mfg. Co., Cleveland, O.
Jackson & Church Co., Saginaw, Mich.
King Stove and Range Co., Sheffield, Ala.
Kleer-Kleen Mfg. Co., Hayward, Calif.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Lawson Mfg. Co., New Kensington, Pa.
Lennox Industries, Inc., Marshalltown, Iowa.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Major Metal Products, Inc., Los Angeles, Calif.
Martin Stamping & Stove Co., Huntsville, Ala.
Meyer Furnace Co., Peoria, Ill.
Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Ill.
National Appliances, Inc., New Kensington, Pa.
Oran Co., Columbus, Ohio.
Payne Div. of Carrier Corp., Monrovia, Calif.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
Queen Stove Works, Inc., Albert Lea, Minn.
Ralph Mfg. Co., Inc., Wadsworth, O.
Ran Appliance Corp., D. P., Compton, Calif.
Rheem Mfg. Co., Chicago, Ill.
Samuel Stamping & Enameling Co., Chattanooga, Tenn.
Southwest Mfg. Co., Aurora, Mo.
Sunshine Mantle Co., Chanute, Kans.
Surface Combustion Corp., Toledo, Ohio.
Temco, Inc., Nashville, Tenn.
Thermo-Products, Inc., North Judson, Ind.
Viking Mfg. Corp., Cleveland, Ohio.
Ward Heater Co., Los Angeles, Calif.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
Zink Co., John, Tulsa, Okla.

FURNACES, WARM AIR, GRAVITY, FLOOR, OIL

Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Auburn Burner Co., Auburn, Ind.
Benner-Nawman, Inc., Oakland, Calif.
Certified Furnace Corp., Trenton, N. J.
Coleman Co., Inc., Wichita, Kans.
Delta Heating Corp., Trenton, N. J.
Domestic Mfg. Co., Seattle, Wash.
Gillen Co., J. L., Detroit, Mich.
Jackson & Church Co., Saginaw, Mich.
Kleer-Kleen Mfg. Co., Hayward, Calif.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Mulkey Co., J. F., Detroit, Mich.
Northwest Metal Products, Inc., Seattle, Wash.
Oran Co., Columbus, Ohio.
Queen Stove Works, Inc., Albert Lea, Minn.
Quiet Automatic Burner Corp., Newark, N. J.
Ralph Mfg. Co., Inc., Wadsworth, O.
Therm Oil Burner Co., Seattle, Wash.
Thermo-Products, Inc., North Judson, Ind.
United Air Heaters, Inc., Seattle, Wash.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.

FURNACES, WARM AIR, GRAVITY, GAS FIRED, CAST IRON

Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
Souther Iron Co., E. E., St. Louis, Mo.
XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, WARM AIR, GRAVITY, GAS FIRED, STEEL

Advance Furnace Co., Wichita, Kans.
Airwasher Corp., Eaton Rapids, Mich.
Aladdin Heating Corp., San Leandro, Calif.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Bard Mfg. Co., Bryan, O.
Beck Engineering Combustion Company, St. Louis, Mo.
Berger Furnace Corp., Belle Vernon, Pa.
Bonair Products, Inc., Darby, Pa.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Campbell Heating Co., Des Moines, Iowa.
Century Engineering Corp., Cedar Rapids, Iowa.
Columbia Burner Co., Toledo, Ohio.
Conco Engineering Works, Mendota, Ill.
Crane Co., Chicago, Ill.
Dalzen Mfg. Co., St. Clair, Mich.
Dornback Furnace & Foundry Co., Cleveland, Ohio.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, Ohio.
Firewel Co., Inc., Buffalo, N.Y.
Floral City Heater Co., Monroe, Mich.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, Ohio.
Fraser and Johnston Co., San Francisco, Calif.
Front Rank Furnace Co., Div. Liberty Foundry Co., St. Louis, Mo.
Green Colonial Furnace Co., Des Moines, Iowa.
Gross-Aire Mfg. Co., St. Louis, Mo.
Hall-Neal Furnace Co., Indianapolis, Ind.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Heating Specialties Co., Baltimore, Md. (Stainless)
Heat-Well Mfg. Co., Oakland, Calif.
Henry Furnace Co., Medina, Ohio.
Holly Mfg. Co., Pasadena, Calif.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
International Heater Co., Utica, N. Y.
International Oil Burner Co., St. Louis, Mo.
Jackson & Church Co., Saginaw, Mich.
Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
Kleenair Furnace Co., Portland, Ore.
Ko-Z-Aire Products, Inc., Red Oak, Iowa.
Kresky Mfg. Co., Inc., Petaluma, Calif.
Lawson Mfg. Co., New Kensington, Pa.
Leeson Air Cond. Corp., Detroit, Mich.
Lennox Industries, Inc., Marshalltown, Iowa.
Little Burner Co., Inc., H. C., San Rafael, Calif.
Lundt, Inc., Ernest C., Little Falls, N. J.
Majestic Co., Inc., Huntington, Ind.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
McDonald Mfg. Co., A. Y., Dubuque, Ia.

Metzger Machine & Engineering Co., Milwaukee, Wis.

Meyer Furnace Co., Peoria, Ill.
Morrison Steel Products, Inc., Buffalo, N. Y.
Mueller Climatrol, Milwaukee, Wis.
Mulkey Co., J. F., Detroit, Mich.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, Ohio.
Olsen Mfg. Co., C. A., Elyria, Ohio.
Oneida Heater Co., Inc., Oneida, N. Y.
Oran Co., Columbus, Ohio.
Pacific Gas Heating Co., San Francisco, Calif.
Patten Co., J. V., Sycamore, Ill.
Payne Beverly Mfg. Co., Beverly Hills, Calif.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
Premier Furnace Co., Dowagiac, Mich.
Radiant-Aire Corp., Michigan City, Ind.
Ralph Mfg. Co., Inc., Wadsworth, O.
Rheem Mfg. Co., Chicago, Ill.
Richmond Radiator Co., Affil, Reynolds Metals Co., Metuchen, N. J.
Round Oak Co., Inc., Dowagiac, Mich.
Rybolt Heater Co., Ashland, Ohio.
Ryniker Steel Products Co., Billings, Mont.
Schill Mfg. Co., Crestline, Ohio.
Schwab Furnace Co., Milwaukee, Wis.
Sheet Metal Mfg. Co., Youngstown, O.
Souther Iron Co., E. E., St. Louis, Mo.
Steel Products Engineering Co., Combustioneer Div., Springfield, O.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Sure Comfort Furnace Co., Forest Park, Ill.
Surface Combustion Corp., Toledo, Ohio.
Temco, Inc., Nashville, Tenn.
Thatcher Furnace Co., Garwood, N. J.
Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
Tordihet Div., Cleveland Steel Products Corp., Cleveland, Ohio.
Viking Mfg. Corp., Cleveland, O.
Waterman-Waterbury Co., Minneapolis, Minn.
Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
Williamson Co., The, Cincinnati, Ohio.
Worsham Co., Inc., University City, Mo.
Zick Sheet Metal Works, Dearborn, Mich.

FURNACES, WARM AIR, GRAVITY, OIL FIRED, CAST IRON

Delta Heating Corp., Trenton, N. J.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
Keith Furnace Co., Des Moines, Iowa.
Montag Inc., Portland, Ore.
Sheet Metal Mfg. Co., Youngstown, O.
XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, WARM AIR, GRAVITY, OIL FIRED, STEEL

Airwasher Corp., Eaton Rapids, Mich.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Armstrong Furnace Co., Columbus, Ohio.
Auburn Burner Co., Auburn, Ind.
Bard Mfg. Co., Bryan, Ohio.
Beck Engineering Combustion Company, St. Louis, Mo.
Berger Furnace Corp., Belle Vernon, Pa.
Bonair Products, Inc., Darby, Pa.
Campbell Heating Co., Des Moines, Iowa.
Cary Mfg. Co., Waupaca, Wis.
Century Engineering Corp., Cedar Rapids, Iowa.
Conco Engineering Works, Mendota, Ill.
Connecticut State Furnace Co., Bridgeport, Conn.
Crane Co., Chicago, Ill.
Dalzen Mfg. Co., St. Clair, Mich.
Daniels Mfg. Co., Inc., Sam, Hardwick, Vt.
Delta Heating Corp., Trenton, N. J.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, Ohio.
Floral City Heater Co., Monroe, Mich.
Furblo Co., Hermansville, Mich.
Gillen Co., J. L., Detroit, Mich.
Green Colonial Furnace Co., Des Moines, Iowa.
Hall-Neal Furnace Co., Indianapolis, Ind.
Hart & Crouse Corp., Oneida, N. Y.
Hart Heat Div., Avery Farm Machinery Co., Peoria, Ill.
Heating Specialties Co., Baltimore, Md. (Stainless)
Henry Furnace Co., Medina, Ohio.
Home Furnace Co., Holland, Mich.
Illinois Iron & Bolt Co., Carpentersville, Ill.

Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N.Y.
 International Oil Burner Co., St. Louis, Mo.
 Jungers Stove & Range Co., Grafton, Wis.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Kaustine Furnace & Tank Corp., Perry, N. Y.
 Keith Furnace Co., Des Moines, Iowa.
 Kleenair Furnace Co., Portland, Ore.
 Ko-Z-Aire Products, Inc., Red Oak, Iowa.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Laco Oil Burner Co., Inc., Griswold, Ia.
 Leeson Air Cond. Corp., Detroit, Mich.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Lundt, Inc., Ernest C., Little Falls, N. J.
 Majestic Co., Inc., Huntington, Ind.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 McKee Furnace Co., Minneapolis, Minn.
 Metro Metal Mfg. Co., Holt, Mich.
 Meyer Furnace Co., Peoria, Ill.
 Montag Inc., Portland, Ore.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Mueller Climatrol, Milwaukee, Wis.
 Mulkey Co., J. F., Detroit, Mich.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Olsen Mfg. Co., C. A., Elyria, Ohio.
 Oran Co., Columbus, Ohio.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Perfection Industries, Div. of Hupp Corp., Cleveland, Ohio.
 Premier Furnace Co., Dowagiac, Mich.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Quincy Stove Mfg. Co., Quincy, Ill.
 Radiant-Aire Corp., Michigan City, Ind.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Rosebraugh Co., W. W., Salem, Ore.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, Ohio.
 Sandberg Mfg. Co., Portland, Ore.
 Schill Mfg. Co., Crestline, O.
 Schwab Furnace Co., Milwaukee, Wis.
 Sheet Metal Mfg. Co., Youngstown, O.
 Souther Iron Co., E. E., St. Louis, Mo.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Sure Comfort Furnace Co., Forest Park, Ill.
 Syncromatic Corp., Watertown, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Therm-O-Blast Div., O'Halloran Inds., Detroit, Mich.
 Viking Mfg. Corp., Cleveland, Ohio.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Williamson Co., The, Cincinnati, Ohio.
 Zick Sheet Metal Works, Dearborn, Mich.

FURNACES, WARM AIR, GRAVITY, PIPELESS, CAST IRON

Agricola Furnace Co., Inc., Gadsden, Ala.
 American Furnace Co., St. Louis, Mo.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Keith Furnace Co., Des Moines, Iowa.
 Montag Inc., Portland, Ore.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Schwab Furnace Co., Milwaukee, Wis.
 Souther Iron Co., E. E., St. Louis, Mo.
 XXth Century Heating & Ventilating Co., Akron, Ohio.

FURNACES, WARM AIR, GRAVITY, PIPELESS, STEEL

American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
 Armstrong Furnace Co., Columbus, Ohio.
 Berger Furnace Corp., Belle Vernon, Pa.
 Daniels Mfg. Co., Inc., Sam, Hardwick, Vt.
 Delta Heating Corp., Trenton, N. J.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Hart & Crouse Corp., Oneida, N. Y.
 Ingersoll Products Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Heater Co., Utica, N. Y.
 Keith Furnace Co., Des Moines, Iowa.
 Lawson Mfg. Co., New Kensington, Pa.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Montag Inc., Portland, Ore.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Oneida Heater Co., Inc., Oneida, N. Y.
 Pennsylvania Furnace & Iron Co., Warren, Pa.

Rosebraugh Co., W. W., Salem, Ore.
 Schill Mfg. Co., Crestline, Ohio.
 Schwab Furnace Co., Milwaukee, Wis.
 Thatcher Furnace Co., Garwood, N. J.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Williamson Co., The, Cincinnati, O.

FURNACES, WARM AIR, GRAVITY, WALL ELECTRIC

Electromode Div. of Commercial Controls, Rochester, N. Y.
 Norris-Thermador Corp., Los Angeles, Calif.

FURNACES, WARM AIR, GRAVITY, WALL, GAS

Advance Furnace Co., Wichita, Kans.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Chattanooga Royal Co., Chattanooga, Tenn.
 Cirklair Products Div., Folsom Co., Inc., Dallas, Texas.
 Colman Co., Inc., Wichita, Kans.
 Commonwealth Co., Alhambra, Calif.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Empire Stove Co., Belleville, Ill.
 General Gas Light Co., Kalamazoo, Mich.
 General Water Heater Corp., Burbank, Calif.
 Hammel Radiator Engineering Co., Los Angeles, Calif.
 Heating Equipment Mfg. Co., San Francisco, Calif.
 Holly Mfg. Co., Pasadena, Calif.
 Hunt Heater Corp., Nashville, Tenn.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Sales Co., San Francisco, Calif.
 King Stove and Range Co., Sheffield, Ala.
 Lawson Mfg. Co., New Kensington, Pa.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Major Metal Products, Inc., Los Angeles, Calif.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Norman Products Co., Inc., Columbus, O.
 Ohio Foundry & Mfg. Co., Steubenville, O.
 O'Keefe & Merritt Co., Los Angeles, Calif.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Pioneer Furnace Co., Los Angeles, Calif.
 Quincy Stove Mfg. Co., Quincy, Ill.
 Rheem Mfg. Co., Chicago, Ill.
 Royal Jet, Inc., Alhambra, Calif.
 Samuel Stamping & Enameling Co., Chattanooga, Tenn.
 San Carlos Mfg. Co., San Carlos, Calif.
 Silent Sioux Corp., Orange City, Ia.
 Southwest Mfg. Co., Aurora, Mo.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Temco, Inc., Nashville, Tenn.
 Utility Appliance Corp., Los Angeles, Calif.
 Ward Heater Co., Los Angeles, Calif.
 Williams Furnace Co., Buena Park, Calif.
 Zink Co., John, Tulsa, Okla.

FURNACES, WARM AIR, GRAVITY, WALL, OIL

Delta Heating Corp., Trenton, N. J.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Little Burner Co., Inc., H. C., San Rafael, Calif.
 Morrison Steel Products, Inc., Buffalo, N. Y.
 Northwest Metal Products, Inc., Seattle, Wash.
 Quincy Stove Co., Quincy, Ill.
 Silent Sioux Corp., George City, Ia.
 Stewart-Warner Corp., Chicago, Ill.

FURNACES, WARM AIR, GRAVITY, WOOD BURNING, CAST IRON

Montag, Inc., Portland, Ore.
 Schwab Furnace Co., Milwaukee, Wis.

FURNACES, WARM AIR, GRAVITY, WOOD BURNING, STEEL

Bovee Furnace Works, Waterloo, Iowa.
 Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Iowa.
 Daniels Mfg. Co., Inc., Sam, Hardwick, Vt.
 Furblo Co., Hermansville, Mich.
 Gross-Aire Mfg. Co., St. Louis, Mo.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Montag, Inc., Portland, Ore.
 Northwest Foundry & Furnace Co., Portland, Ore.
 Rosebraugh Co., W. W., Salem, Ore.
 Sandberg Mfg. Co., Portland, Ore. (Sawdust)
 Syncromatic Corp., Watertown, Wis.
 Williamson Co., The, Cincinnati, O.
 Worsham Co., Inc., University City, Mo.

GAGES, DRAFT, INDICATING, PORTABLE

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Bristol Co., Waterbury, Conn.
Defender Instrument & Regulator Co., St. Louis, Mo.
Detroit Air Conditioning Service Co., Nashville, Mich.
Dwyer Mfg. Co., F. W., Michigan City, Ind.
Ellison Draft Gage Co., Chicago, Ill.
Hays Corp., Michigan City, Ind.
Hill & Co., E. Vernon, Lake Geneva, Wis.
Meriam Instrument Co., Cleveland, Ohio.
Moeller Instrument Co., Richmond Hill, N. Y.
Perfex Corp., Milwaukee, Wis.
Precision Thermometer & Instrument Co., Philadelphia, Pa.
Preferred Utilities Mfg. Corp., New York, N. Y.
Uehling Instrument Co., Paterson, N. J.

GAGES, INDICATING, FILTER RESISTANCE

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Dwyer Mfg. Co., F. W., Michigan City, Ind.
Ellison Draft Gage Co., Chicago, Ill.
Rex Metal-Craft, Inc., Indianapolis, Ind.
Trion, Inc., McKees Rocks, Pa.
Uehling Instrument Co., Paterson, N. J.

GAGES, MAGNETIC

American Actuator Corp., New York, N. Y.

GAGES, TANK, FUEL OIL

Applied Mechanics Co., Boston, Mass.
Barclay, Inc., Robt., Chicago, Ill.
Bearlee Products Co., Green Bay, Wis.
Boston Machine Works Co., Lynn, Mass.
Carlson Co., Inc., A. B., Aurora, Ill.
Hasko Utilities Co., New York, N. Y.
Kresno-Stamm Mfg. Co., Palisades Park, N. J.
Krueger Sentry Gauge Co., Green Bay, Wis.
Liquidepth Indicators, Inc., Long Island City, N. Y.
Liquidometer Corp., Long Island City, N. Y.
Mel-Gauge Co., New Haven, Conn.
Meriam Instrument Co., Cleveland, O.
Morse-Smith-Morse Co., The, Watertown, Mass.
Oil Equipment Mfg. Co., New Haven, Conn.
Rochester Mfg. Co., Inc., Rochester, N. Y.
Scully Signal Co., Melrose, Mass.
Uehling Instrument Co., Paterson, N. J.

GALVANIZED SHEETS

See Sheets, Metal, Steel, Galvanized

GAS BURNER CONTROLS

See Controls; Control Systems

GAS BURNERS

See Burners, Conversion, Gas

GASKETS, FILTER FRAME SEALING

Greene, Tweed & Co., North Wales, Pa.
Neff-Perkins Co., Cleveland, O.
United Mineral & Chemical Corp., New York, N. Y.

GATES, BLAST

Berger Bros. Co., Philadelphia, Pa.
Buffalo Forge Co., Buffalo, N. Y.
Champion Blower & Forge Co., Lancaster, Pa.
Clarage Fan Co., Kalamazoo, Mich.
Day Co., Minneapolis, Minn.
Eclipse Fuel Engineering Co., Rockford, Ill.
Goethel Sheet Metal Works, Inc., Alfred, Milwaukee, Wis.
Kirk & Blum Mfg. Co., Cincinnati, Ohio.
Newcomb-Detroit Co., Detroit, Mich.
Puhl & Hepper Mfg. Co., Inc., St. Louis, Mo.
R-S Products Corp., Philadelphia, Pa.
Rees Blow Pipe Mfg. Co., Inc., Berkeley, Calif.
Skinner Heating & Ventilating Co., St. Louis, Mo.
Spencer Turbine Co., Hartford, Conn.
Western Blower Co., Seattle, Wash.
Winkler & Sons, Inc., A. E., Milwaukee, Wis.

GEARING, SKYLIGHT

See Lifts, Skylight

GERMICIDAL APPARATUS

See Sterilizers, Air

GLASS, INSULATED WINDOW PANELS

L. O. F Glass Fibers Co., Toledo, O.

GLASS, WIRE, FOR SKYLIGHTS

Atcheson Glass Co., T. J., Buffalo, N. Y.
Blue Ridge Glass Corp., Kingsport, Tenn.
Klauer Mfg. Co., Dubuque, Ia.
Pennsylvania Wire Glass Co., Philadelphia, Pa.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Robertson Co., H. H., Pittsburgh, Pa.

GRAVITY FURNACES

See Furnaces, Warm Air, Gravity

GRAVITY REGISTERS

See Registers, Heating, Ventilating and Air Conditioning

GREASE FILTERS

See Filters, Grease

GRILLES, HEATING, VENTILATING AND AIR CONDITIONING

Also See Faces and Registers

A & A Register Co., Cleveland, Ohio.
A-J Mfg. Co., Kansas City, Mo.
Adelta Mfg. Co., Philadelphia, Pa.
Air Control Products, Inc., Coopersville, Mich.
Air Distribution Products Co., Los Angeles, Calif.
Air-Factors, Inc., Monrovia, Calif.
American Warming & Ventilating Co., Toledo, Ohio.
America Welding & Mfg. Co., Building Products Div., Warren, O. (Door)
Auer Register Co., Cleveland, Ohio.
Barber-Colman Co., Rockford, Ill.
Beckley Perforating Co., Garwood, N. J.
Berger Furnace Corp., Belle Vernon, Pa.
Char-Gale Mfg. Co., Anoka, Minn.
Cleveland Register & Grille Mfg. Co., Cleveland, O.
Controlair Mfg. Co., Los Angeles, Calif.
Corbman Bros., Inc., Philadelphia, Pa.
Diamond Mfg. Co., Wyoming, Pa.
Erdle Perforating Co., Rochester, N. Y.
General Register Corp., Cedar Grove, N. J.
Harrington & King Perforating Co., Chicago, Ill.
Harrison Sheet Steel Co., Chicago, Ill.
Hart & Cooley Mfg. Co., Holland, Mich.
Hastings Air Conditioning Co., Inc., Hastings, Nebr.
Hastings Air Control, Inc., Omaha, Nebr.
Hendrick Mfg. Co., Carbondale, Pa.
Independent Register Co., Cleveland, Ohio.
Johnston & Chapman Co., Chicago, Ill.
Juniper Elbow Co., Inc., Middle Village, L. I., N. Y.
Krueger Air Conditioning Co., Tucson, Ariz.
Lennox Industries, Inc., Marshalltown, Ia.
Lima Register Co., Lima, Ohio.
Louva Corp., Union, N. J.
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.
Midco Register Corp., St. Paul, Minn.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Mundt & Sons, Charles, Jersey City, N. J.
National Grille & Register Co., Cleveland, O.
National-U. S. Radiator Corp., Johnstown, Pa.
Patco Mfg. Co., Philadelphia, Pa.
Radiant-Aire Corp., Michigan City, Ind.
Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
Rock Island Register Co., Rock Island, Ill.
Smith Co., J. B., Philadelphia, Pa.
Stewart Mfg. Co., Cedar Grove, N. J.
Temco, Inc., Nashville, Tenn.
Titus Mfg. Corp., Waterloo, Ia.
Tuttle & Bailey, Inc., New Britain, Conn.
United States Register Co., Battle Creek, Mich.
Viking Mfg. Corp., Cleveland, O.
Waterloo Register Co., Inc., Waterloo, Ia.
Wilde Register & Grille Co., Detroit, Mich.

GRILLES, RETURN AIR

For Perimeter Systems

Barber-Colman Co., Rockford, Ill.
Hart & Cooley Mfg. Co., Holland, Mich.
Lennox Industries, Inc., Marshalltown, Ia.
Lima Register Co., Lima, O.
Titus Mfg. Corp., Waterloo, Ia.
Waterloo Register Co., Inc., Waterloo, Ia.

GRINDERS, BUFFERS, POLISHERS AND SANDERS

See Buffers, Grinders, Polishers and Sanders

GROOVING MACHINES

See *Machines, Grooving*

GUARDS, SNOW

Barnard Co., Geo. A., Worcester, Mass.
Berger Bros. Co., Philadelphia, Pa.
Cartier & Sons Co., M. N., Providence, R. I.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cromley's, Lewisburg, Pa.
Danzer Metal Works Co., Hagerstown, Md.
Downs-Smith Brass & Copper Co., New York, N. Y.
Folsom Snow Guard Co., Holliston, Mass.
Hussey & Co., C. G., Pittsburgh, Pa.
Levow, David, New York, N. Y.
Obdyke, Inc., Philadelphia, Pa.
Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.

GUNS, PLASTIC WELDING

Seelye Craftsmen, The, Minneapolis, Minn.

GUNS, RIVET

Chicago Pneumatic Tool Co., New York, N. Y.
Huck Mfg. Co., Detroit, Mich.
Remington Arms Co., Inc., Bridgeport, Conn.
Velocity-Power Tool Co., Pittsburgh, Pa.

GUNS, SOOT

Miller Product Co., Lansing, Mich.
S. O. S. Products Co., Inc., Brooklyn, N. Y.

GUNS, SPRAY, METAL

Albertson & Co., Inc., Sioux City, Ia.
Wall Colmonoy Corp., Detroit, Mich.

GUNS, SPRAY, PAINT

Binks Mfg. Co., Chicago, Ill.
Black Mfg. Co., Harrison, N. J.
Eclipse Air Brush Co., Newark, N. J.
Electro Dustless Painting, Inc., Elmwood, Conn.
Plummer Spray Equipment Co., Napoleon, Ohio.
Spray Engineering Co., Somerville, Mass.
Thomas Industries, Inc., Electric Sprayit Div., Sheboygan, Wis.

GUTTER ACCESSORIES

Hangers, Strainers, Mitters, Ends, Thimbles, Guards, etc.

Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
Alabama Metal Lath Co., Birmingham, Ala.
American Metal Products, Los Angeles, Calif.
Atchison Specialty Mfg. Co., Atchison, Kans.
Barnes Metal Products Co., Chicago, Ill.
Berger Bros. Co., Philadelphia, Pa.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Bertram Mfg. Co., Chicago, Ill.
Braden Mfg. Co., Inc., Terre Haute, Ind.
Ceco Steel Products Corp., Chicago, Ill.
Char-Gale Mfg. Co., Anoka, Minn.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cincinnati Elbow Co., Cincinnati, O.
Downs-Smith Brass & Copper Co., New York, N. Y.
Enderle Inc., Ltd., Frank X., Los Angeles, Calif.
Famous Furnace Co., Cleveland, Ohio. (Strap hangers, end caps).
G & A Mfg. Co., Addison, Ill.
Galvan Mfg. Co., New Albany, Ind.
Gerhardt Co., Inc., George T., Sausalito, Calif.
Glatt Co., Wm. E., Chicago, Ill.
Grand Rapids Wire Products Co., Grand Rapids, Mich.
Gray Metal Products, Inc., Rochester, N. Y.
Harrison Sheet Steel Co., Chicago, Ill.
Hussey & Co., C. G., Pittsburgh, Pa. (Copper).
Inland Steel Products Co., Milwaukee, Wis.
J & J Sheet Metal Co., Van Dyke, Mich.
Klauer Mfg. Co., Dubuque, Iowa.
LaCrosse Steel Roofing & Corrugating Co., LaCrosse, Wis.
Levow, David, New York, N. Y.
Lockhart Mfg. Corp., Detroit, Mich. (Guards)
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Melaway Corp., Brandon, Wis.
Moncrief Lenoir Mfg. Co., Houston, Tex.
New Delphos Mfg. Co., Delphos, Ohio.
Newport Steel Corp., Newport, Ky.
Northwest Metal Products, Inc., Seattle, Wash.

Obdyke, Inc., B. P., Philadelphia, Pa.
Penn Supply & Metal Corp., Philadelphia, Pa.
Profit Products Co., Chicago, Ill.
Quaker State Metals Co., Lancaster, Pa.
Ralph Mfg. Co., Inc., Wadsworth, Ohio.
Reeves Steel & Mfg. Co., Dover, Ohio.
Republic Steel Corp., Cleveland, O.
Reynolds Metals Co., Louisville, Ky. (Aluminum).
Riggin Metal Products, Inc., Kankakee, Ill.
Roofing & Supply Co., Chattanooga, Tenn.
Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y.
Sioux Steel Co., Sioux Falls, S. D.
Snap-On Mfg. Co., Chicago, Ill. (Hangers).
Southern Iron Co., E. E., St. Louis, Mo.
Standard Furnace Supply Co., Ltd., Omaha, Nebr.
Steele Mfg. Co., Ashland, Ky. (Gutter guards).
Thor Metal Products Co., Inc., Syracuse, N. Y.
Tiffin Art Metal Co., Tiffin, Ohio. (Hangers, miters, ends, thimbles).
Wade Mfg. Co., Div. of Woodruff & Edwards, Inc., Elgin, Ill. (Roof Drains).
Wallace Co., William, Metalbestos Div., Belmont, Calif.
Wheeling Corrugating Co., Wheeling, W. Va.

GUTTER FORMERS

See *Machines, Gutter Forming*

GUTTERS

Acme Mfg. Co., Philadelphia, Pa. (Galvanized and aluminum)
Ajax Furnace Fittings Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
Alabama Metal Lath Co., Birmingham, Ala. (Steel & copper).
American Brass Co., Waterbury, Conn. (Copper)
Barnes Metal Products Co., Chicago, Ill. (Zinc, aluminum, galvanized, copper)
Berger Bros. Co., Philadelphia, Pa.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Braden Mfg. Co., Inc., Terre Haute, Ind.
Ceco Steel Products Corp., Chicago, Ill. (Galvanized steel).
Char-Gale Mfg. Co., Anoka, Minn.
Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Copper)
Enderle Inc., Ltd., Frank X., Los Angeles, Calif. (Galvanized)
G & A Mfg. Co., Addison, Ill.
Harrison Sheet Steel Co., Chicago, Ill. (Alum.)
Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
Inland Steel Products Co., Milwaukee, Wis. (Galvanized & copper)
Klauer Mfg. Co., Dubuque, Iowa.
La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis. (Galvanized steel)
Matthiessen & Hegeler Zinc Co., LaSalle, Ill. (Zinc)
Miller & Doing, Brooklyn, N. Y.
Moncrief Lenoir Mfg. Co., Houston, Tex.
New Delphos Mfg. Co., Delphos, Ohio. (Galv. steel)
Newport Steel Corp., Newport, Ky. (Galvanized steel)
Northwest Metal Products, Inc., Seattle, Wash. (Galv. & copper)
Obdyke, Inc., B. P., Philadelphia, Pa. (Copper, galv. & stainless steel)
Penn Supply & Metal Corp., Philadelphia, Pa. (Galvanized copper & aluminum)
Perkinson, William J., Chicago, Ill. (Copper & galvanized)
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Quaker State Metals Co., Lancaster, Pa. (Aluminum and galvanized)
Reeves Steel & Mfg. Co., Dover, Ohio. (Galvanized steel)
Republic Steel Corp., Cleveland, O. (Stainless steel).
Reynolds Metals Co., Louisville, Ky. (Aluminum).
Riggin Metal Products, Kankakee, Ill.
Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y. (Copper, galvanized, aluminum)
Ryniker Steel Products Co., Billings, Mont.
Schecter Bros. Co., Philadelphia, Pa. (Galvanized & copper)
Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y. (Aluminum, copper, galvanized & zinc)
Sheet Metal Products Co., Peoria, Ill.
Sioux Steel Co., Sioux Falls, S. Dak. (Galv. & copper)
Southbridge Roofing Co., Inc., Southbridge, Mass. (Galv. & copper)
Southern Iron Co., E. E., St. Louis, Mo. (Galv.)
Standard Furnace Supply Co., Omaha, Nebr. (Galv.)
Superior Safety Furnace Pipe Co., Detroit, Mich.
Thor Metal Products Co., Inc., Syracuse, N. Y. (Galv. & copper)

Tiffin Art Metal Co., Tiffin, Ohio. (Aluminum, stainless steel, copper & galv.)
 Van Noorden Co., E., Boston, Mass.
 Wheeling Corrugating Co., Wheeling, W. Va. (Galvanized steel)
 Wallace Co., William, Metalbestos Div., Belmont, Calif. (Galvanized & copper)

HACK SAWS

See Machines, Sheet Metal Working, Saws, Hack

HAMMERS, POWER

Black & Decker Mfg. Co., Towson, Md. (Electric)
 Burgess Thomas Co., Bloomfield, N. J. (Pneumatic)
 Chicago Pneumatic Tool Co., New York, N. Y.
 Gibson Industries, Muskegon Heights, Mich. (Electric)
 Keller Tool Co., Grand Haven, Mich. (Pneumatic)
 Merchandising and Mfg. Associates, Inc., Lancaster, Pa. (Pneumatic)
 Millers Falls Co., Greenfield, Mass. (Electric)
 Milwaukee Electric Tool Corp., Milwaukee, Wis. (Electric)
 Nobel & Stanton, Inc., Bedford, Ohio. (Electric)
 Phillips Drill Co., Michigan City, Ind. (Electric)
 Polis Mfg. Co., J. D., Chicago, Ill. (Electric)
 Powder Power Tool Corp., Portland, Ore. (Powder charged)
 Rotor Tool Co., Cleveland, Ohio. (Pneumatic)
 Skil Corp., Chicago, Ill. (Pneumatic)
 Stanley Electric Tool Div., Stanley Works, New Britain, Conn. (Electric)
 Superior Pneumatic & Mfg., Inc., Cleveland, Ohio. (Pneumatic)
 Synton Co., Homer City, Pa. (Electric)
 Tempo Products, Cleveland, O. (Electric)
 Thor Power Tool Co., Aurora, Ill. (Electric & pneumatic)
 Wodack Electric Tool Corp., Chicago, Ill. (Electric)

HAND SHEARS

See Tools, Sheet Metal Workers

HANGERS AND SUPPORTS, DUCT

See Fastenings, Sheet Metal

HARDWARE, CABINET AND CASING

Handles, name plates, locks, etc.

American Cabinet Hardware Corp., Rockford, Ill. (Pulls, knobs, hinges, catches, etc.)
 American Insulator Corp., New Freedom, Pa.
 Corbin Div., P. & F., American Hardware Corp., New Britain, Conn. (Handles, catches, locks, hinges)
 Etched Products Co., Long Island City, N. Y. (Name Plates)
 Fisher Brass Foundry, Los Angeles, Calif. (Handles)
 Hartwell Co., Los Angeles, Calif.
 Metalcraft, Inc., Mason City, Ia. (Name plates)
 Moss Industries, Inc., Brooklyn, N. Y.
 National Lock Co., Rockford, Ill. (Hinges, crating bolts)
 North Shore Nameplate Inc., Bayside, L. I., N. Y.
 Soss Mfg. Co., Detroit, Mich. (Invisible hinges)
 Star Stainless Screw Co., Paterson, N. J. (Piano hinges)

HARDWARE, DUCT FITTING

Corbman Bros., Inc., Philadelphia, Pa.
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Hartwell Co., Los Angeles, Calif.
 Ventfabrics, Inc., Chicago, Ill.

HEAT PUMPS

See Units, Air Conditioning, Central Plant, Summer-Winter

HEAT RECOVERERS

See Recoverers, Heat

HEATERS, AIR, DIRECT FIRED, COAL

Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Ia.
 Jackson & Church Co., Saginaw, Mich.
 Johnson Heater Corp., Chelsea, Mass.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 National Heater Co., St. Paul, Minn.
 Olson & Co., Arthur A., Canfield, O.
 Rosebraugh Co., W. W., Salem, Ore.

HEATERS, AIR, DIRECT FIRED, COMBINATION GAS AND OIL

Air Conditioning Engineering Co., Cambridge, Mass.
 Airtherm Mfg. Co., St. Louis, Mo.

Campbell Co., E. K., Kansas City, Mo.
 Dravo Corp., Machinery Div., Pittsburgh, Pa.
 Drying Systems, Inc., Chicago, Ill.
 Jackson & Church Co., Saginaw, Mich.
 Lee Corp., Wilmington, Del.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Olson & Co., Arthur A., Canfield, O.
 Prat-Daniel Corp., South Norwalk, Conn.

HEATERS, AIR, DIRECT FIRED, GAS, CENTRIFUGAL FAN TYPE

For Furnaces for Central Plant Installation EXCLUSIVELY for Duct Distribution of the Air, See the Listing Under Furnaces

Air Conditioning Engineering Co., Cambridge, Mass.
 Airtherm Mfg. Co., St. Louis, Mo.
 American Foundry & Furnace Co., Bloomington, Ill.
 American Furnace Co., St. Louis, Mo.
 Auburn Burner Co., Auburn, Ind.
 Automatic Gas Equipment Co., Pittsburgh, Pa.
 Auto-Therm Mfg. Co., Detroit, Mich.
 Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Ia.
 Chicago Steel Furnace Co., Chicago, Ill.
 Dravo Corp., Pittsburgh, Pa.
 Drying Systems, Inc., Chicago, Ill.
 General Gas Light Co., Kalamazoo, Mich.
 Hastings Air Conditioning Co., Inc., Hastings, Neb.
 Hayes Furnace Mfg. & Supply Co., Los Angeles, Calif.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 International Sales Co., San Francisco, Calif.
 Jackson & Church Co., Saginaw, Mich.
 Johnson Heater Corp., Chelsea, Mass.
 Kilbury Mfg. Co., Inc., Lawndale, Calif.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Nat Corp., Kansas City, Mo.
 National Heater Co., St. Paul, Minn.
 Newcomb-Detroit Co., Detroit, Mich.
 Norman Products Co., Inc., Columbus, O.
 Olson & Co., Arthur A., Canfield, O.
 OverHead Heaters, Inc., Detroit, Mich.
 Payne Div., of Carrier Corp., Monrovia, Calif.
 Prat-Daniel Corp., East Port Chester, Conn.
 Rexnor Mfg. Co., Mercer, Pa.
 Rockwell Co., W. S., Fairfield, Conn.
 Sterlairco, Inc., Westfield, Mass.
 Surface Combustion Corp., Toledo, O.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Utility Appliance Corp., Los Angeles, Calif.
 Vapor Heating Corp., Chicago, Ill.
 Zink Co., John, Tulsa, Okla.

HEATERS, AIR, DIRECT FIRED, OIL, CENTRIFUGAL FAN TYPE

Auto-Therm Mfg. Co., Detroit, Mich.
 Dravo Corp., Pittsburgh, Pa.
 Drying Systems, Inc., Chicago, Ill.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Vapor Heating Corp., Chicago, Ill.

HEATERS, AIR, DIRECT FIRED, OIL, FLOOR TYPE

Air Conditioning Engineering Co., Cambridge, Mass.
 Airtherm Mfg. Co., St. Louis, Mo.
 American Foundry & Furnace Co., Bloomington, Ill.
 Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
 Campbell Co., E. K., Kansas City, Mo.
 Campbell Heating Co., Des Moines, Ia.
 Chicago Steel Furnace Co., Chicago, Ill.
 Dravo Corp., Machinery Div., Pittsburgh, Pa.
 Drying Systems, Inc., Chicago, Ill.
 Gilbert & Barker Mfg. Co., West Springfield, Mass.
 Jackson & Church Co., Saginaw, Mich.
 Johnson Heater Corp., Chelsea, Mass.
 MaGirl Foundry & Furnace Co., Bloomington, Ill.
 Mammoth Furnace Co., St. Paul, Minn.
 National Heater Co., St. Paul, Minn.
 Olson & Co., Arthur A., Canfield, O.
 Prat-Daniel Corp., East Port Chester, Conn.
 Williams Div., Eureka Williams Corp., Bloomington, Ill.

HEATERS, AIR, DIRECT FIRED, OIL, PORTABLE, FOR INDUSTRIAL SPACE HEATING

Air Conditioning Engineering Co., Cambridge, Mass.
Auburn Burner Co., Auburn, Ind.
Bica Co., Girard, O. (50,000-85,000 Btu)
Cauhorn Distributing Co., Detroit, Mich. (190,000 Btu)
Chicago Steel Furnace Co., Chicago, Ill.
Delta Heating Corp., Trenton, N. J.
Dravo Corp., Pittsburgh, Pa.
Fageol Co., R. D., Heat Machine Div., Kent, O.
Mortemp Div., Mechanical Products Co., Seattle, Wash.
National Heater Co., St. Paul, Minn.
Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
Olson & Co., Arthur A., Canfield, O.
Prat-Daniel Corp., East Port Chester, Conn.
Quiet Automatic Oil Burner Corp., Newark, N. J.

HEATERS, AIR, DIRECT FIRED, OIL, SUSPENDED TYPE

Air Conditioning Engineering Co., Cambridge, Mass.
Airtherm Mfg. Co., St. Louis, Mo.
American Foundry & Furnace Co., Bloomington, Ill.
Auburn Burner Co., Auburn, Ind.
American Furnace Co., St. Louis, Mo.
Beck Engineering Combustion Kompany, St. Louis, Mo.
Cox Mfg. Co., Ridgeville, Ind.
Campbell Co., E. K., Kansas City, Mo.
Chicago Steel Furnace Co., Chicago, Ill.
Delta Heating Corp., Trenton, N. J.
Dravo Corp., Machinery Div., Pittsburgh, Pa.
Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
Gilbert & Barker Mfg. Co., West Springfield, Mass.
Harvey-Whipple, Inc., Springfield, Mass.
Jackson & Church Co., Saginaw, Mich.
Lee Corp., Wilmington, Del.
Mueller Climatrol, Milwaukee, Wis.
National Heater Co., St. Paul, Minn.
Olson & Co., Arthur A., Canfield, O.
Overhead Heaters, Inc., Detroit, Mich.
Petro, Cleveland, O.
Prat-Daniel Corp., East Port Chester, Conn.
Quiet Automatic Oil Burner Corp., Newark, N. J.
Waterman-Waterbury Co., The, Minneapolis, Minn.
Williams Oil-O-Matic Div., Eureka Williams Corp., Bloomington, Ill.

HEATERS, DUCT, GAS

Allan Engineering Co., Dallas, Tex.
Automatic Gas Equipment Co., Pittsburgh, Pa.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Burnham Corp., Irvington, N. Y.
Carrier Corp., Syracuse, N. Y.
Dravo Corp., Machinery Div., Pittsburgh, Pa.
General Gas Light Co., Kalamazoo, Mich.
Great National Air Conditioning Corp., Oklahoma City, Okla.
Hastings Air Control, Inc., Omaha, Nebr.
Hayes Furnace Mfg. & Supply Co., Los Angeles, Calif.
Henry Furnace Co., Medina, O.
International Sales Co., San Francisco, Calif.
Jackson & Church Co., Saginaw, Mich.
Kehm Corp., The, Chicago, Ill.
Lennox Industries, Inc., Marshalltown, Ia.
Modine Mfg. Co., Racine, Wis.
National Heater Co., St. Paul, Minn.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, O.
Olsen Mfg. Co., The C. A., Elyria, O.
Payne Div. of Carrier Corp., Monrovia, Calif.
Reznor Mfg. Co., Mercer, Pa.
Royal Jet, Inc., Alhambra, Calif.
Skinner Heating & Ventilating Co., Div. St. Louis Blow Pipe & Heater Co., Inc., St. Louis, Mo.
Sterlairoco, Inc., Westfield, Mass.
Surface Combustion Corp., Toledo, O.
Utility Appliance Corp., Los Angeles, Calif.
Wing Mfg. Co., L. J., Linden, N. J.

HEATERS, DUCT, OIL

Certified Furnace Corp., Trenton, N. J.
Delta Heating Corp., Trenton, N. J.
Jackson & Church Co., Saginaw, Mich.
Overhead Heaters, Inc., Detroit, Mich.

HEATERS, SUSPENDED, RADIANT, GAS FIRED

Carrier Corp., Syracuse, N. Y.

Nat Corp., Kansas City, Mo.
Olson & Co., Arthur A., Canfield, O.
Power Engineering Co., Chicago, Ill.
Prat-Daniel Corp., South Norwalk, Conn.

HEATERS, UNIT, FOR INSTALLATIONS REQUIRING DUCTWORK

See Furnaces, Forced Warm Air

HEATERS, UNIT, GAS, PROPELLER FAN TYPE

Airtherm Mfg. Co., St. Louis, Mo.
Allan Engineering Co., Dallas, Tex.
American Blower Corp., Detroit, Mich.
American Furnace Co., St. Louis, Mo.
Automatic Gas Equipment Co., Pittsburgh, Pa.
Barwick Mfg. Corp., Wichita, Kan.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Carrier Corp., Syracuse, N. Y.
Crane Co., Chicago, Ill.
Day & Night Div., Carrier Corp., Monrovia, Calif.
Dravo Corp., Machinery Div., Pittsburgh, Pa.
Fedders-Quigan Corp., Buffalo, N. Y.
General Gas Light Co., Kalamazoo, Mich.
Grinnell Co., Inc., Providence, R. I.
Hastings Air Conditioning Co., Hastings, Nebr.
Hastings Air Control, Inc., Omaha, Nebr.
Henry Furnace Co., The, Medina, O.
International Sales Co., San Francisco, Calif.
Ilg Electric Ventilating Co., Chicago, Ill.
Jackson & Church Co., Saginaw, Mich.
Kisco Boiler & Engineering Co., St. Louis, Mo.
Mission Appliance Corp., Hawthorne, Calif.
Modine Mfg. Co., Racine, Wis.
Mueller Climatrol, Milwaukee, Wis.
Nat Corp., Kansas City, Mo.
National-U. S. Radiator Corp., Johnstown, Pa.
Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
Nesbitt, Inc., John J., Philadelphia, Pa.
Norman Products Co., Inc., Columbus, O.
Olsen Mfg. Co., The C. A., Elyria, O.
Payne Div. of Carrier Corp., Monrovia, Calif.
Reznor Mfg. Co., Mercer, Pa.
Roberts-Gordon Appliance Corp., Buffalo, N. Y.
Sonner Burner Co., Winfield, Kan.
Sterlairoco, Inc., Westfield, Mass.
Surface Combustion Corp., Toledo, O.
Temco, Inc., Nashville, Tenn.
Trane Co., The, La Crosse, Wis.
United States Air Conditioning Corp., Minneapolis, Minn.
Utility Appliance Corp., Los Angeles, Calif.
Vacuum Gas Burner Co., Olean, N. Y.
Webster & Co., Warren, Camden, N. J.
Westinghouse Electric Corp., Sturtevant Div., Hyde Park, Boston, Mass.
Wing Mfg. Co., L. J., Linden, N. J.
Worthington Corp., Harrison, N. J.
Zink Co., John, Tulsa, Okla.

HEATERS, UNIT, OIL, PROPELLER FAN TYPE

Certified Furnace Corp., Trenton, N. J.
Delta Heating Corp., Trenton, N. J.
Weatherall Engineers, Inc., Providence, R. I.
Worthington Corp., Harrison, N. J.

HEATERS, WATER, STORAGE TYPE, DOMESTIC, ELECTRIC

Bard Mfg. Co., Bryan, Ohio.
Bastian-Morley Co., Inc., La Porte, Ind.
Bock Corp., Madison, Wis.
Bowen Water Heater Div., Handling Equipment Mfg. Corp., Wixom, Mich.
Buckeye Water Heater Co., Cleveland, O.
Cady Co., Sub. General Fittings Co., Providence, R. I.
Carrier Corp., Syracuse, N. Y.
Clayton & Lambert Mfg. Co., Louisville, Ky.
Cleveland Heater Co., Cleveland, Ohio.
Combustion Engineering Co., Inc., Chattanooga, Tenn.
Crane Co., Chicago, Ill.
Cuprometal Mfg. Corp., Corona, N. Y.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Duo-Therm Div., Motor Wheel Corp., Lansing, Mich.
Fairbanks, Morse & Co., Chicago, Ill.
Frigidaire Div., General Motors Corp., Dayton, Ohio.
Gray & Dudley Co., Nashville, Tenn.
Hotstream Heater Co., Cleveland, Ohio.
Hynes & Cox Electric Corp., Watervliet, N. Y.

Kelvinator Div., American Motors Corp., Detroit, Mich.
 Lawson Mfg. Co., New Kensington, Pa.
 McGraw Electric Co., Clark Div., Chicago, Ill.
 Mor-Flo Heater Corp., Cleveland, O.
 National Appliances, Inc., New Kensington, Pa.
 National Steel Construction Co., Inc., Logansport, Ind.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Norris-Thermador Corp., Los Angeles, Calif.
 Pennsylvania Range Boiler Co., Philadelphia, Pa.
 Perfection Industries, Inc., Cleveland, Ohio.
 Piatt Products Corp., Lansing, Mich.
 Pioneer Water Heater Corp., Los Angeles, Calif.
 Red Spot Electric Co., Tacoma, Wash.
 Rheem Mfg. Co., Chicago, Ill.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Tru-Mac Mfg. Co., Reading, Mass.
 Viking Mfg. Corp., Cleveland, Ohio.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Westinghouse Electric Corp., Pittsburgh, Pa.
 Wood Co., John, Conshohocken, Pa.
 York-Shipley, Inc., York, Pa.

HEATERS, WATER, STORAGE TYPE, DOMESTIC, GAS FIRED (ALSO LP GAS)

Aldrich Co., Wyoming, Ill.
 Aqua-Air Corp., Elmont, L. I., N. Y.
 Bard Mfg. Co., Bryan, Ohio.
 Bastian Mfg. Co., W. B., Los Angeles, Calif.
 Bastian-Morley Co., Inc., LaPorte, Ind.
 Bock Corp., Madison, Wis.
 Bowen Water Heater Div., Handling Equipment Mfg. Corp.,
 Wixom, Mich.
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Buckeye Water Heater Co., Cleveland, Ohio.
 Carrier Corp., Syracuse, N. Y.
 Cirkla Products Div. Folsom Co., Inc., Dallas, Texas.
 Clayton & Lambert Mfg. Co., Louisville, Ky.
 Cleveland Heater Co., Cleveland, Ohio.
 Coleman Co., Inc., Wichita, Kans.
 Combustion Engineering Co., Inc., Chattanooga, Tenn.
 Continental Water Heater Co., Los Angeles, Calif.
 Crane Co., Chicago, Ill.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Dearborn Stove Co., Dallas, Tex.
 Delco Appliance Div. General Motors Corp., Rochester, N. Y.
 Duo-Therm Div., Motor Wheel Corp., Lansing, Mich.
 EverHot Heater Co., Detroit, Mich.
 Fairbanks, Morse & Co., Chicago, Ill.
 Gillen Co., J. L., Detroit, Mich.
 General Water Heater Corp., Burbank, Calif.
 Graham Hambly Co., Los Angeles, Calif.
 Gray & Dudley Co., Nashville, Tenn.
 Handley-Brown Heater Co., Jackson, Mich. (With circulating
 fan for augmenting central heating systems)
 Harrison Sheet Steel Co., Chicago, Ill.
 Hotstream Heater Co., Cleveland, Ohio.
 Hoyt Heater Co. of No. Calif., Oakland, Calif.
 Hynes & Cox Electric Corp., Watervliet, N. Y.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich.
 Lawson Mfg. Co., New Kensington, Pa.
 Lovekin Water Heater Co., Philadelphia, Pa.
 McDaniel Mfg. Co., Inc., Dallas, Texas.
 McGraw Electric Co., Clark Div., Chicago, Ill.
 Mission Appliance Corp., Hawthorne, Calif.
 Mor-Flo Heater Corp., Cleveland, O.
 Mustee Heater Co., Cleveland, Ohio.
 National Appliances, Inc., New Kensington, Pa.
 National Steel Construction Co., Inc., Logansport, Ind.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Pacific Coast Heater Corp., San Gabriel, Calif.
 Pennsylvania Range Boiler Co., Philadelphia, Pa.
 Perfection Industries, Inc., Cleveland, O.
 Pioneer Water Heater Corp., Los Angeles, Calif.
 Pittsburgh Water Heater Co., Pittsburgh, Pa.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Rasch Mfg. Corp., Kansas City, Mo.
 Republic Heater Corp., Huntington Park, Calif.
 Rheem Mfg. Co., New York, N. Y.
 Riverside Boiler & Engineering Co., Inc., Fort Worth, Tex.
 Ruud Mfg. Co., Kalamazoo, Mich.
 Sands Mfg. Co., Cleveland, O.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Southern Heater Corp., Compton, Calif.
 Southwestern Heater Corp., Dallas, Texas.
 SuperBO Mfg. Co., Los Angeles, Calif.

Trageser Copper Works, Inc., Maspeth, L.I., N.Y.
 Utility Appliance Corp., Los Angeles, Calif.
 Viking Mfg. Corp., Cleveland, Ohio.
 Wayne Home Equipment Co., Inc., Fort Wayne, Ind.
 Wood Co., John, Conshohocken, Pa.
 York-Shipley, Inc., York, Pa.

HEATERS, WATER, STORAGE TYPE, DOMESTIC, OIL FIRED

Aldrich Co., Wyoming, Ill.
 Allen Mfg. Co., Inc., Nashville, Tenn.
 Aqua-Air Corp., Elmont, L. I., N. Y.
 Bock Corp., Madison, Wis.
 Breeze Corps., Inc., Newark, N. J.
 Brown Products Corp., Forest Hills, N. Y.
 Buckeye Water Heater Co., Cleveland, O.
 Century Engineering Corp., Cedar Rapids, Iowa.
 Coleman Co., Inc., Wichita, Kans.
 Crane Co., Chicago, Ill.
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Duo-Therm Div., Motor Wheel Corp., Lansing, Mich.
 Electrol Burner Mfg. Co., Rutherford, N. J.
 General Oil Heating Corp., West New York, N. J.
 Gilcor Products Corp., Dowagiac, Mich.
 Gillen Co., J. L., Dowagiac, Mich.
 Gilmore & Co., Jackson G., Columbus, Ohio.
 Hotstream Heater Co., Cleveland, Ohio.
 Hynes & Cox Electric Corp., Watervliet, N. Y.
 Johnson Co., S. T., Oakland, Calif. & Philadelphia, Pa.
 Kresky Mfg. Co., Inc., Petaluma, Calif.
 Kresno-Stamm Mfg. Co., New York, N. Y.
 National Steel Construction Co., Inc., Logansport, Ind.
 Nu-Way Corp., Rock Island, Ill.
 Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
 Perfection Industries, Inc., Cleveland, Ohio.
 Piatt Products Corp., Lansing, Mich.
 Preferred Utilities Mfg. Corp., New York, N. Y.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Quiet Automatic Burner Corp., Newark, N. J.
 Radiant Utilities Corp., Brooklyn, N. Y.
 Ray Oil Burner Co., San Francisco, Calif.
 Republic Products Co., Philadelphia, Pa.
 Rheem Mfg. Co., Chicago, Ill.
 Smith Heater Co., Peter, Detroit, Mich.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co.,
 Jackson, Mich.
 Toledo Heater Co., Toledo, Ohio.
 Toridheet Div., Cleveland Steel Products Corp., Cleveland, O.
 Viking Mfg. Corp., Cleveland, Ohio.

HEATERS, WATER, STORAGE TYPE, DOMESTIC, STOKER FIRED

Aqua-Air Corp., Elmont, L. I., N. Y.
 Gehl Bros. Mfg. Co., West Bend, Wis.

HEATING COILS

See Coils, Heating

HOISTS, HAND AND POWER

American Engineering Co., Philadelphia, Pa. (Power)
 American MonoRail Co., Cleveland, Ohio. (Electric)
 Bridgeport Chain & Mfg. Co., Bridgeport, Conn.
 Chester Hoist Div., National Screw & Mfg. Co., Lisbon, O.
 (Hand & power)
 Chicago Pneumatic Tool Co., New York, N. Y. (Power)
 Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp.,
 Tonawanda, N. Y.
 Cleveland Crane & Engineering Co., Wickliffe, Ohio. (Hand &
 electric)
 Detroit Hoist & Machine Co., Detroit, Mich.
 Euclid Crane & Hoist Co., Euclid, Ohio. (Electric)
 Ford Chain Block Div., American Chain & Cable Co., Inc.,
 York, Pa. (Hand & electric)
 Harnischfeger Corp., Milwaukee, Wis. (Electric & hand)
 Industrial Brownhoist Corp., Bay City, Mich.
 Keller Tool Div., Gardner-Denver Co., Grand Haven, Mich.
 (Power)
 Lug-All Co., Haverford, Pa.
 McCollum Hoist & Mfg. Co., Downers Grove, Ill.
 Ohio Hoist & Mfg. Co., Inc., Cleveland, O. (Hand & power)
 Philadelphia Chain Block & Mfg. Co., Inc., Philadelphia, Pa.
 Reading Crane & Hoist Corp., Reading, Pa. (Hand & power)
 Robbins & Myers, Inc., Springfield, Ohio. (Hand & power)
 Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

Stephens-Adamson Mfg. Co., Aurora, Ill.
 Thor Power Tool Co., Aurora, Ill. (Power)
 Wright Hoist Div., American Chain & Cable Co., York, Pa.
 (Electric)
 Yale & Towne Mfg. Co., Philadelphia, Pa.

HOODS, DRAFT, GAS

See Draft Diverters, Gas Heaters

HOODS, VENTILATING, FOR KITCHENS

Gray & Dudley Co., Nashville, Tenn.
 Haveg Corp., Newark, Del. (Plastic)
 Heil Process Equipment Corp., Cleveland, O. (Plastic)
 NuTone, Inc., Cincinnati, O.
 S & C Mfg. Co., Cincinnati, O. (Plastic)
 Stanthony Corp., Los Angeles, Calif. (Metal)
 Stewart Industries, Inc., Indianapolis, Ind.
 Trade-Wind Motor Fans, Inc., Rivera, Calif. (Metal)
 Universal Blower Co., Birmingham, Mich.

HOSE AND FITTINGS, METAL, FLEXIBLE

Aeroquip Corp., Jackson, Mich.
 American Metal Hose Div., American Brass Co., Waterbury, Conn.
 Cobra Metal Hose Div., D K Mfg. Co., Chicago, Ill.
 Everhot Products Co., Chicago, Ill.
 Flexonics Corp., Maywood, Ill.
 Hunt & Son, Inc., C. B., Salem, Ohio.
 International Metal Hose Co., Bellevue, O.
 Packless Metal Hose, Inc., New Rochelle, N. Y.
 Pennsylvania Flexible Metallic Tubing Co., Philadelphia, Pa.
 Seamflex Co., Inc., Long Island City, N.Y.
 Techniflex Corp., Port Jervis, N. Y.
 Titeflex, Inc., Newark, N. J.
 United Metal Hose Co., Inc., Long Island City, N. Y.
 Universal Metal Hose Co., Chicago, Ill.

HOUSINGS, BLOWER AND FAN

Air Controls, Inc., Cleveland, Ohio.
 Ammerman Co., C. L., Minneapolis, Minn.
 Barry Blower Co., Minneapolis, Minn.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brundage Co., Kalamazoo, Mich.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chicago Blower Corp., Franklin Park, Ill.
 Clarage Fan Co., Kalamazoo, Mich.
 Commercial Shearing & Stamping Co., Youngstown, Ohio.
 DeBothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Detroit Stamping Co., Detroit, Mich.
 Fulton Steelcraft Co., Swanton, O.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Haveg Corp., Newark, Del. (Plastic)
 Jan-Air, Inc., Richmond, Ill.
 Lau Blower Co., Dayton, Ohio.
 Martin Fan & Blower Co., Chicago, Ill.
 Nelson Products, Herman, American Air Filter Co., Inc., Louisville, Ky.
 Northern Blower Co., Cleveland, Ohio.
 Power Engineering Co., Chicago, Ill.
 Revcor, Carpentersville, Ill.
 Sandberg Mfg. Co., Portland, Ore.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Utica Products, Inc., Utica, N. Y.
 Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.

HUMIDIFIER FITTINGS

See Fittings, Humidifier, Water Line

HUMIDIFIER VALVES

See Valves, Humidifier, Water Level

HUMIDIFIERS, FURNACE, AUTOMATIC, EVAPORATIVE

Auto-Flo Corp., Detroit, Mich.
 Automatic Humidifier Co., Cedar Falls, Iowa.
 Char-Gale Mfg. Co., Anoka, Minn.
 Cleveland Humidifier Co., Cleveland, Ohio.
 Detroit Float Co., Air Conditioning Products Div., Detroit, Mich.
 Econo-Matic Products Co., Inc., Detroit, Mich.
 General Filters, Inc., Novi, Mich.

Hansen Tool & Die Co., Milwaukee, Wis.
 Harvey-Hill, Inc., St. Louis, Mo.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Maid-O'-Mist, Inc., Chicago, Ill.
 Mueller Climatrol, Milwaukee, Wis.
 Research Products Corp., Madison, Wis.
 Skilbeck Mfg. Co., Kenosha, Wis.
 Skuttle Mfg. Co., Milford, Mich.
 Steel Products Engineering Co., Combustioneer Div., Springfield, O.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.

HUMIDIFIERS, FURNACE, AUTOMATIC, SPRAY

Century Engineering Corp., Cedar Rapids, Iowa.
 Daffin Mfg. Co., Lancaster, Pa.
 Lennox Industries, Inc., Marshalltown, Ia.
 Little Giant Vaporizer Co., Oklahoma City, Okla.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Pollen Ex, Chicago, Ill.
 Somers, Inc., H. J., Detroit, Mich.
 Spray Engineering Co., Somerville, Mass.
 Spraying Systems Co., Chicago, Ill.
 Walton Laboratories, Inc., Irvington, N. J.

HUMIDIFIERS, PORTABLE

Abbeon Supply Co., Jamaica, N. Y.
 Daffin Mfg. Co., Lancaster, Pa.
 Fresh'nd-Aire Co., Div. of Cory Corp., Chicago, Ill.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Research Products Corp., Madison, Wis.
 Walton Laboratories, Inc., Irvington, N. J.

HUMIDISTATS

See Controls

HUMIDITY RECORDERS

See Recorders, Humidity

HYGROMETERS

Airguide Instrument Co., Chicago, Ill.
 American Instrument Co., Inc., Silver Spring, Md.
 Bristol Co., Waterbury, Conn.
 Foxboro Co., Foxboro, Mass.
 G. M. Mfg. Co., New York, N. Y.
 General Scientific Equipment Co., Philadelphia, Pa.
 H-B Instrument Co., Philadelphia, Pa.
 Johnson Service Co., Milwaukee, Wis.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Moeller Instrument Co., Richmond Hill, N. Y.
 Palmer Thermometers, Inc., Cincinnati, Ohio.
 Philadelphia Thermometer Co., Philadelphia, Pa.
 Precision Thermometer & Instrument Co., Philadelphia, Pa.
 Taylor Instrument Companies, Rochester, N. Y.
 Walton Laboratories, Inc., Irvington, N. J.
 Weksler Thermometer Corp., Freeport, N. Y.
 Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.

INCINERATORS

Autogas Co., Bellewood, Ill.
 Blue-Ray Gas Burner Co., Detroit, Mich.
 Bowser, Inc., Cairo, Ill.
 Calcinator Corp., Bay City, Mich.
 Cole Hot Blast Mfg. Co., Chicago, Ill.
 Comstock-Castle Stove Co., Quincy, Ill.
 Cribben and Sexton Co., Chicago, Ill.
 Donley Bros. Co., Cleveland, O.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Duo-Therm Div., Motor Wheel Corp., Lansing, Mich.
 Gasinator Mfg. Co., Cleveland, O.
 General Engineering Co., Bay City, Mich.
 Goder Incinerator Corp., Chicago, Ill.
 Harmond Co., Cleveland, O.
 Heimbach Incinerator Mfg. Co., St. Paul, Minn.
 Henry Furnace Co., Medina, O.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
 Kerner Incinerator Div., Morse-Boulger Destructor Co., New York, N.Y.
 King Stove and Range Co., Sheffield, Ala.
 Locke Stove Co., Kansas City, Mo.
 Lyons, Edward W., Youngstown, O.
 Majestic Co., Inc., Huntington, Ind.
 Martin Stamping & Stove Co., Huntsville, Ala.
 Modern Controls Corp., Centerline, Mich.

Mueller Climatrol, Milwaukee, Wis.
 Nelson Industries, Pittsburgh, Pa.
 Olsen Mfg. Co., C. A., Elyria, O.
 Pettit & Sons Co., Inc., W. T., Youngstown, O.
 Queen Stove Works, Inc., Albert Lea, Minn.
 Schwab Furnace Co., Milwaukee, Wis.
 Standard Fuel Engineering Co., Detroit, Mich.
 Thompson Mfg. Co., A. F., Huntington, W. Va.
 Union Mfg. and Gauge Co., Syracuse, N. Y.

INDICATING THERMOMETERS

See Thermometers, Indicating

INSULATING CEMENT

See Cement, Insulating

INSULATION, BUILDING

Acme Asbestos Covering & Flooring Co., Chicago, Ill. (Rockwool)
 Alfoll Div., Reflectal Corp., New York, N. Y. (Blanket)
 American Flange & Mfg. Co., Inc., New York, N. Y. (Reflective)
 American Hair & Felt Co., Chicago, Ill. (Hair)
 American Sisalkraft Corp., Attleboro, Mass. (Reflective)
 Angier Corp., Framingham, Mass. (Reflective)
 Armstrong Cork Co., Lancaster, Pa. (Wood fiber, glass fiber)
 Baldwin-Hill Co., Trenton, N. J. (Mineral wool)
 Barnhardt Mfg. Co., Charlotte, N. C.
 Barrett Div. Allied Chemical & Dye Corp., New York, N. Y. (Rockwool)
 Berger Furnace Corp., Belle Vernon, Pa. (Rockwool)
 Cabot, Inc., Samuel, Boston, Mass.
 Carey Co., Philip, Cincinnati, Ohio. (Mineral wool)
 Celotex Corp., Chicago, Ill.
 Certain-teed Products Corp., Ardmore, Pa. (Glass fiber)
 Chamberlin Co. of America, Detroit, Mich. (Rockwool)
 Dow Chemical Co., Midland, Mich. (Plastic)
 Eagle-Picher Co., Cincinnati, Ohio. (Mineral Wool)
 Flintkote Co., New York, N. Y. (Fibre board & insulating wool)
 Infra Insulation, Inc., New York, N. Y. (Accordion aluminum)
 Insulite Div. Minnesota & Ontario Paper Co., Minneapolis, Minn. (Wood fibre)
 Johns-Manville, New York, N. Y.
 Johnston Foil Mfg. Co., St. Louis, Mo. (Paper backed foil)
 Kimberly-Clark Corp., Neenah, Wis.
 L. O. F. Glass Fibers Co., Toledo, O. (Fiber glass)
 Lockport Mills Inc., Lockport, N. Y. (Blanket)
 Meadows, Inc., W. R., Elgin, Ill. (Cork & Asphalt)
 Minnesota & Ontario Paper Co., Minneapolis, Minn. (Board and wood fiber)
 Mundet Cork Corp., North Bergen, N. J. (Cork)
 National Cork Co., Englewood, N. J. (Cork)
 National Gypsum Co., Buffalo, N. Y. (Fiber board)
 Owens-Corning Fiberglas Corp., Toledo, Ohio. (Board & blanket)
 Pacific Lumber Co., San Francisco, Calif. (Wood fiber)
 Pittsburgh Corning Corp., Pittsburgh, Pa. (Cellular glass)
 Pittsburgh Plate Glass Co., Pittsburgh, Pa. (Cellular glass)
 Plastergon Wall Board Co., Buffalo, N. Y.
 Quaker State Metals Co., Lancaster, Pa. (Aluminum reflective)
 Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Riverton Lime & Stone Co., Inc., Riverton, Va. (Mineral wool)
 Robinson Insulation Co., Great Falls, Mont. (Vermiculite)
 Ruberoid Co., New York, N. Y. (Aluminum foil)
 Silvercote Products, Inc., Chicago, Ill. (Reflective type)
 Spravo-Flake Co., Chicago, Ill. (Mineral fiber & adhesive)
 Standard Asbestos Mfg. Co., Chicago, Ill. (Asbestos)
 Standard Rolling Mills Div. of Revere Copper and Brass Inc., Brooklyn, N. Y. (Reflective)
 Tennessee Products & Chemical corp., Nashville, Tenn. (Mineral wool)
 United Cork Cos., Kearney, N. J.
 United States Gypsum Co., Chicago, Ill. (Mineral wool)
 United States Mineral Wool Co., Stanhope, N. J. (Mineral wool)
 U. S. Rock Wool Co., Salt Lake City, Utah. (Blowing wool, batt and blanket)
 Western Rock Wool Corp., Huntington, Ind. (Fill)
 Wilson & Co., Inc., Chicago, Ill. (Hair, Felt)
 Wilson, Inc., Grant, Chicago, Ill. (Rock Wool)
 Wood Conversion Co., St. Paul, Minn.
 Zonolite Co., Chicago, Ill.

INSULATION, DUCT

Acme Asbestos Covering & Flooring Co., Chicago, Ill.
 Alfoll Div. Reflectal Corp., New York, N. Y. (Aluminum foil)
 American Hair & Felt Co., Chicago, Ill. (Hair felt)
 Armstrong Cork Co., Lancaster, Pa. (Glass fiber)
 Baldwin-Hill Co., Trenton, N. J. (Mineral wool)
 Cabot, Inc., Samuel, Boston, Mass.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Celotex Corp., Chicago, Ill.
 Eagle-Picher Co., Cincinnati, Ohio.
 Ehret Magnesia Mfg. Co., Valley Forge, Pa.
 Gustin-Bacon Mfg. Co., Kansas City, Mo. (Glass fiber)
 Hinde & Dauch Paper Co., Sandusky, Ohio.
 Johns-Manville, New York, N. Y.
 Keasbey & Mattison Co., Ambler, Pa. (Asbestos)
 Keystone Asphalt Products Co., Chicago, Ill.
 L. O. F. Glass Fibers Co., Toledo, O. (Fiber glass)
 LaCled-Christy Clay Products Co., St. Louis, Mo.
 Lockport Mills Inc., Lockport, N. Y. (Blanket)
 Mortell Co., J. W., Kankakee, Ill. (Cork coating)
 Mundet Cork Corp., North Bergen, N. J. (Cork)
 Munn and Steele, Inc., Newark, N. J. (Plastic)
 National Cork Co., Englewood, N. J. (Cork)
 Norristown Magnesia & Asbestos Co., Norristown, Pa.
 Owens-Corning Fiberglas Corp., Toledo, Ohio. (Rigid & flexible with facings)
 Pabco Products Inc., San Francisco, Calif. (Magnesia)
 Pittsburgh Corning Corp., Pittsburgh, Pa. (Cellular glass)
 Pittsburgh Plate Glass Co., Pittsburgh, Pa. (Cellular Glass)
 Quigley Co., Inc., New York, N. Y.
 Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill. (Reflective)
 Refractory & Insulation Corp., New York, N. Y. (Inside duct lining)
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Robinson Insulation Co., Great Falls, Mont.
 Ruberoid Co., New York, N. Y. (Asbestos)
 Sall Mountain Co., Hamilton, O. (Asbestos)
 Spravo-Flake Co., Chicago, Ill. (Mineral fiber & adhesive)
 Standard Asbestos Mfg. Co., Chicago, Ill. (Asbestos)
 United Cork Cos., Kearney, N. J.
 United States Mineral Wool Co., Stanhope, N. J. (Mineral wool)
 United States Rubber Co., New York, N. Y. (Sound deadening)
 Western Felt Works, Chicago, Ill. (Felt)
 Wilson & Co., Inc., Chicago, Ill. (Hair & felt)
 Wilson, Inc., Grant, Chicago, Ill.
 Wood Conversion Co., St. Paul, Minn.

INSULATION, FURNACE

Acme Asbestos Covering & Flooring Co., Chicago, Ill. (Asbestos, rockwool)
 Alfoll Div. Reflectal Corp., New York, N. Y. (Aluminum foil & asbestos combination)
 Babcock & Wilcox Co., Refractories Div., New York, N. Y. (Firebrick, cement mixes)
 Baldwin-Hill Co., Trenton, N. J. (Mineral wool)
 Carey Mfg. Co., Philip, Cincinnati, Ohio. (Asbestos & magnesia)
 Eagle-Picher Co., Cincinnati, Ohio.
 Ehret Magnesia Mfg. Co., Valley Forge, Pa.
 Green Fire Brick Co., A. P., Mexico, Mo. (Mineral wool)
 Gustin-Bacon Mfg. Co., Kansas City, Mo. (Glass fiber)
 Johns-Manville, New York, N. Y.
 Keasbey & Mattison Co., Ambler, Pa. (Asbestos)
 L. O. F. Glass Fibers Co., Toledo, O.
 LaCled-Christy Clay Products Co., St. Louis, Mo. (Cement & blocks)
 Norristown, Magnesia & Asbestos Co., Norristown, Pa.
 Owens-Corning Fiberglas Corp., Toledo, Ohio. (Foil faced)
 Pabco Products Inc., San Francisco, Calif.
 Plibrico Jointless Firebrick Co., Chicago, Ill. (Mineral Wool)
 Quigley Co., Inc., New York, N. Y.
 Refractory & Insulation Corp., New York, N. Y. (Block, blanket)
 Robinson Insulation Co., Great Falls, Mont. (High temperature cement)
 Ruberoid Co., New York, N. Y. (Asbestos and calisite)
 Standard Asbestos Mfg. Co., Chicago, Ill. (Asbestos)
 United States Mineral Wool Co., Stanhope, N. J. (Mineral wool)
 U. S. Rock Wool Co., Salt Lake City, Utah. (Rock wool cement)
 Wilson, Inc., Grant, Chicago, Ill. (Asbestos)

INSULATION, TUBING

Goodrich Co., B. F., Sponge Products Div., Shelton, Conn.

KITCHEN FANS

See Fans, Kitchen

LAMPS, GERMICIDAL

General Electric Co., Cleveland, Ohio.
Merchandising & Mfg. Associates, Inc., Lancaster, Pa.
Sampson Chemical and Pigment Corp., Chicago, Ill.
Sperti Faraday, Inc., Cooper Hewitt Div., Cincinnati, O.
Westinghouse Electric Corp., Bloomfield, N. J.

LEAD SHEETS

See Sheets, Metal, Lead

LIFTS, SKYLIGHT

Biersach & Niedermeyer Co., Milwaukee, Wis.
Lewow, David, New York, N. Y.
Park City Cornice Works, Inc., Bridgeport, Conn.
Perkinson, William J., Chicago, Ill.
Van Noorden Co., E., Boston, Mass.
Weiss & Co., H., New York, N. Y.

LIMIT CONTROLS

See Controls, Limit

LININGS, BLOW PIPE

Goodyear Tire and Rubber Co., Inc., Akron, O.

LININGS, CHIMNEY

Acme Mfg. Co., Philadelphia, Pa. (Stainless steel)
Condensation Engineering Corp., Chicago, Ill. (Vitreous enamel)
Excelsior Steel Furnace Co., Chicago, Ill. (Stainless steel)
Wallace Co., William, Metalbestos Div., Belmont, Calif.

LINKS, FUSIBLE

Division Lead Co., Summit, Ill.
Empire Metal Co., Syracuse, N. Y.
General Register Corp., Cedar Grove, N. J.
Morse-Smith-Morse Co., Watertown, Mass.
Richards-Wilcox Mfg. Co., Aurora, Ill.
Steffens-Amberg Co., Newark, N. J.
Westinghouse Electric Corp., Pittsburgh, Pa.

LOCK FORMERS

*See Machines, Sheet Metal Working, Pittsburgh Lock Forming;
Machines, Sheet Metal Working, Lock Forming*

LOCK OPENERS

See Machines, Sheet Metal Working, Pittsburgh Lock Opening

LOUVERS AND SHUTTERS, AUTOMATICALLY OR MANUALLY CONTROLLED

Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
Aerovent Fan Co., Inc., Piqua, O.
Air Conditioning Engineering Co., Cambridge, Mass.
Air Controls, Inc., Cleveland, Ohio.
Airmaster Corp., Chicago, Ill.
Air-Path Products Co., Baltimore, Md.
Air & Refrigeration Corp., New York, N. Y.
Allen Cooler & Ventilator Inc., Rochester, Mich.
American Coolair Corp., Jacksonville, Fla.
American Steel Band Co., Pittsburgh, Pa.
American Warming & Ventilating Co., Toledo, Ohio.
Ammerman Co., C. L., Minneapolis, Minn.
Arex Co., Chicago, Ill.
Arlington Electric Co., St. Louis, Mo.
Barber-Colman Co., Rockford, Ill.
Belco Industries, Inc., St. Louis, Mo.
Berns Mfg. Co., Chicago, Ill.
Bertram Co., Harvey P., Cincinnati, Ohio.
Biersach & Niedermeyer Co., Milwaukee, Wis.
Bishop & Babcock Mfg. Co., Cleveland, Ohio.
Black Mfg. Co., Harrison, N. J.
Buffalo Forge Co., Buffalo, N. Y.
Burt Mfg. Co., Akron, Ohio.
Cargocaire Engineering Corp., New York, N. Y.
Champion Blower & Forge Co., Lancaster, Pa.
Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
Cirklair Products Div., Folsom Co., Inc., Dallas, Tex.
Clay Equipment Corp., Cedar Falls, Iowa.
Commercialaire, Inc., Brooklyn, N. Y.
Controlair Mfg. Co., Los Angeles, Calif.
Detroit Floot Co., Air Conditioning Products Div., Detroit, Mich.

Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
Eagle-Picher Co., Cincinnati, Ohio.
Electrovent Fan & Mfg. Co., Chicago, Ill.
Elgo Shutter & Mfg. Co., Detroit, Mich.
Empire Ventilation Equipment Co., Long Island City, N. Y.
Frigid, Inc., Brooklyn, N. Y.
General Blower Co., Morton Grove, Ill.
Hunter Fan & Ventilating Co., Memphis, Tenn.
International Engineering, Inc., Dayton, Ohio.
Jordan & Co., Inc., Paul R., Indianapolis, Ind.
Kirk & Blum Mfg. Co., Cincinnati, Ohio.
Lakewood Engineering & Mfg. Co., Chicago, Ill.
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Martin Fan & Blower Co., Chicago, Ill.
Meier Electric & Machine Co., Inc., Indianapolis, Ind.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Myers Electric Co., Inc., Pittsburgh, Pa.
New York Blower Co., Chicago, Ill.
Overly Mfg. Co., Greensburg, Pa.
Peerless Electric Co., Warren, Ohio.
Perkinson, William J., Chicago, Ill.
Reed Unit-Fans, Inc., New Orleans, La.
Rich Fan Mfg. Co., Phil., Houston, Tex.
Robertson Co., H. H., Pittsburgh, Pa.
Schwitzer-Cummins Co., Indianapolis, Ind.
Signal Electric Div., King-Seely Corp., Menominee, Mich.
Simpson Co., Oakland, Calif.
Standard Electric Mfg. Co., Inc., West Berlin, N. J.
Standard Stamping & Perforating Co., Chicago, Ill.
Swartwout Co., Cleveland, Ohio.
Titus Mfg. Corp., Waterloo, Iowa.
Tuttle & Bailey, Inc., New Britain, Conn.
United States Register Co., Battle Creek, Mich.
Uno Ventilator Co., Malden, Mass.
Van Noorden Co., E., Boston, Mass.
Warner Ventilator Co., LeGrange, Ind.
Wing Mfg. Co., L. J., Linden, N. J.
Young Regulator Co., Cleveland, Ohio.

LOUVERS, STATIONARY

Aerovent Fan Co., Inc., Piqua, O.
Air Conditioning Engineering Co., Cambridge, Mass.
Air Control Products, Inc., Coopersville, Mich.
Air-Path Products Co., Baltimore, Md.
Allen Cooler & Ventilator Inc., Rochester, Mich.
American Foundry & Furnace Co., Bloomington, Ill.
American Metal Works, Inc., New Orleans, La.
American Steel Band Co., Pittsburgh, Pa.
American Warming & Ventilating Co., Toledo, Ohio.
Ammerman Co., C. L., Minneapolis, Minn.
Appleton Supply Co., Inc., Appleton, Wis.
Arex Co., Chicago, Ill.
Barber-Colman Co., Rockford, Ill.
Berger Furnace Corp., Belle Vernon, Pa.
Burt Mfg. Co., Akron, Ohio.
Ceco Steel Products Corp., Chicago, Ill.
Cirklair Products Div., Folsom Co., Inc., Dallas, Tex.
Commercialaire, Inc., Brooklyn, N. Y.
Delta Heating Corp., Trenton, N. J. (For unit heaters)
Donley Bros. Co., Cleveland, O.
Elgo Shutter & Mfg. Co., Detroit, Mich.
Empire Ventilation Equipment Co., Long Island City, N. Y.
Firecraft Corp., Chicago, Ill.
Frigid, Inc., Brooklyn, N. Y.
Industrial Equipment Co., The, Minster, O.
Inland Steel Products Co., Milwaukee, Wis.
Kirk & Blum Mfg. Co., Cincinnati, O.
Leslie Welding Co., Inc., Chicago, Ill.
Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
Martin Fan & Blower Co., Chicago, Ill.
Molloy Machine Corp., Chicago, Ill.
Muckle Mfg. Co., Owatonna, Minn.
Perkinson, William J., Chicago, Ill.
Robertson Co., H. H., Pittsburgh, Pa.
Simpson Co., Oakland, Calif.
Swartwout Co., Cleveland, Ohio.
Titus Mfg. Corp., Waterloo, Iowa.
United States Gypsum Co., Chicago, Ill.
United States Register Co., Battle Creek, Mich.
Uno Ventilator Co., Malden, Mass.
Waterloo Register Co., Inc., Waterloo, Ia.
Wilder Products Co., Springfield, O.

LOUVERS, SUN REFLECTING

Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Kawneer Co., Niles, Mich.
Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.

MACHINERY, SHEET METAL, REBUILT AND USED

Capacity 10 ga or lighter

Acme Equipment Co., Inc., Chicago, Ill.
Burns Machinery Co., F. W., Milwaukee, Wis.
Federal Machinery Co., New York, N. Y.
Harris Machinery Co., Minneapolis, Minn.
Interstate Machinery Co., Inc., Chicago, Ill.
Potts-Farrington Co., Philadelphia, Pa.
Reiner & Campbell Co., Inc., Newark, N. J.
St. Louis Tool Co., St. Louis, Mo.
Stueck, Inc., W. Whitney, Old Saybrook, Conn.

MACHINES, SHEET METAL WORKING, ANGLE IRON BENDING

Diesel Power, Inc., Greenville, Pa.
Excelsior Tool & Machine Co., East St. Louis, Ill.
Hendley & Whittemore Co., Beloit, Wis.
Hossfeld Mfg. Co., Winona, Minn.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Pedrick Tool & Machine Co., Philadelphia, Pa.

MACHINES, SHEET METAL WORKING, BAR FOLDING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Fallsington Mfg. Co., Fallsington, Pa.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
St. Louis Tool Co., St. Louis, Mo.
Smith, R. E., Waukegan, Ill.

MACHINES, SHEET METAL WORKING, BEADING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Kraus Mfg. Co., Chas. E., Louisville, Ky.
Niagara Machine & Tool Works, Buffalo, N. Y.
Packham Crimper Co., Mechanics-Burgh, Ohio.
Peck, Stow & Wilcox Co., Southington, Conn.
Robertson, F. L., Buffalo, N. Y.

MACHINES, SHEET METAL WORKING, BEADING, POWER

American Pullmax Co., Inc., Chicago, Ill.
Fallsington Mfg. Co., Fallsington, Pa.
Kane & Roach, Inc., Syracuse, N. Y.
Kling Bros. Engineering Works, Chicago, Ill.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Swain Mfg. Co., Fred J., St. Louis, Mo.
Wales-Strippit Corp., North Tonawanda, N. Y.

MACHINES, SHEET METAL WORKING, BENDERS

Bath Company, Cyril, Cleveland, Ohio. (Contour formers)
Champion Blower & Forge Co., Lancaster, Pa.
Diesel Power, Inc., Greenville, Pa.
Excelsior Tool & Machine Co., East St. Louis, Ill. (Circular bending)
Hendley & Whittemore Co., Beloit, Wis.
Hossfeld Mfg. Co., Winona, Minn.
Kane & Roach, Inc., Syracuse, N. Y.
Kling Bros. Engineering Works, Chicago, Ill.
Knights Co., James, Sandwich, Ill.
Martens & Stormoen, West Quincy, Mass.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Smith, R. E., Waukegan, Ill.
Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, BRAKES, HAND

Acme Equipment Co., Inc., Chicago, Ill.
Barth Engineering & Mfg. Co., Milldale, Conn.
Berkroy Products Co., Burbank, Calif.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., Southington, Conn.
Rotex Punch Co., Inc., San Leandro, Calif.
Smith, R. E., Waukegan, Ill.
Stueck, Inc., W. Whitney, Old Saybrook, Conn.
Ward Machinery Co., Chicago, Ill.
Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, BRAKES, PORTABLE

Berkroy Products Co., Burbank, Calif.

Dreis & Krump Mfg. Co., Chicago, Ill.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., Southington, Conn.
Stueck, Inc., W. Whitney, Old Saybrook, Conn.
Vyke Mfg. Co., Denver, Colo.
Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, BRAKES, POWER

Airtherm Mfg. Co., St. Louis, Mo.
Bath Co., Cyril, Solon, O.
Cincinnati Shaper Co., Cincinnati, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Dreis & Krump Mfg. Co., Chicago, Ill.
Excelsior Tool & Machine Co., East St. Louis, Ill.
Heartley Machine & Tool Co., Toledo, Ohio.
Niagara Machine & Tool Works, Buffalo, N. Y.
Pacific Industrial Mfg. Co., Oakland, Calif.
Service Machine Co., Inc., Elizabeth, N. J.
Stueck, Inc., W. Whitney, Old Saybrook, Conn.
Verson Allsteel Press Co., Chicago, Ill.
Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, BRAKES, PRESS

Airtherm Mfg. Co., St. Louis, Mo.
American Actuator Corp., New York, N. Y.
Bath Co., Cyril, Solon, O.
Dreis & Krump Mfg. Co., Chicago, Ill.
Doelger & Kirsten, Inc., Milwaukee, Wis.
Excelsior Tool & Machine Co., East St. Louis, Ill.
Fallsington Mfg. Co., Fallsington, Pa.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Pacific Industrial Mfg. Co., Oakland, Calif.
Service Machine Co., Inc., Elizabeth, N. J.
Stueck, Inc., W. Whitney, Old Saybrook, Conn.
Verson Allsteel Press Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, BURRING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, BURRING, POWER

Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Thor Power Tool Co., Aurora, Ill.

MACHINES, SHEET METAL WORKING, CLEAT BENDING, HAND

Lockformer Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Smith, R. E., Waukegan, Ill.

MACHINES, SHEET METAL WORKING, COMBINATION, HAND

Beading, Burring, Turning, Wiring, etc.

Barth Engineering & Mfg. Co., Milldale, Conn.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Packham Crimper Co., Mechanics-Burgh, Ohio.
Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, COMBINATION, POWER

Beading, Burring, Turning, Wiring, etc.

Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Wysong & Miles Co., Greensboro, N. C.

MACHINES, SHEET METAL WORKING, CRIMPING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Fallsington Mfg. Co., Fallsington, Pa.
Kraus Mfg. Co., Chas. E., Louisville, Ky.
Maxant Button & Supply Co., Chicago, Ill.
Merchandising & Mfg. Associates, Inc., Lancaster, Pa.
Niagara Machine & Tool Works, Buffalo, N. Y.

Packham Crimper Co., Mechanics-Burgh, Ohio.
Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, CRIMPING, POWER

Fallsington Mfg. Co., Fallsington, Pa.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Swaine Mfg. Co., Fred J., St. Louis, Mo.

MACHINES, SHEET METAL WORKING, DOUBLE SEAMING, ROOF, POWER

Flagler Corp., The, Detroit, Mich.
Lockformer Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Swaine Mfg. Co., Fred J., St. Louis, Mo.

MACHINES, SHEET METAL WORKING, DUCT FORMING

See Machines, Sheet Metal Working, Grooving

MACHINES, SHEET METAL WORKING, ELBOW, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, ELBOW, POWER

Kane & Roach, Inc., Syracuse, N. Y.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, FILING

DoALL Co., Des Plaines, Ill.
Grob Inc., Grafton, Wis.

MACHINES, SHEET METAL WORKING, FLANGING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Lockformer Co., Chicago, Ill.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Original Metal Forming Machine Co., Seattle, Wash.
Peck, Stow & Wilcox Co., Southington, Conn.
Smith, R. E., Waukegan, Ill.
Ward Machinery Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, FLANGING, POWER

Bath Co., Cyril, Solon, O.
Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
Fallsington Mfg. Co., Fallsington, Pa.
Flagler Corp., The, Detroit, Mich.
Kling Bros. Engineering Works, Chicago, Ill.
Lockformer Co., Chicago, Ill.
Maplewood Machinery Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Pacific Industrial Mfg. Co., Oakland, Calif.
Peck, Stow & Wilcox Co., Southington, Conn.
Swaine Mfg. Co., Fred J., St. Louis, Mo.
Ward Machinery Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, GROOVING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
Enderle, Inc., Ltd., Frank X., Los Angeles, Calif.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, GROOVING, POWER

Hardco Products, Wantagh, N. Y.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Speed-Seam Co., Chicago, Ill.
Standard Power Groove Machine Corp., New York, N. Y.

MACHINES, SHEET METAL WORKING, GUTTER FORMING, HAND OR POWER

Kane & Roach, Inc., Syracuse, N. Y. (Power)
Robertson, F. L., Buffalo, N. Y.
Stamco, Inc., New Bremen, Ohio.

MACHINES, SHEET METAL WORKING, LOCK FORMING, POWER

Fallsington Mfg. Co., Fallsington, Pa.
Flagler Corp., The, Detroit, Mich.
Kane & Roach, Inc., Syracuse, N. Y.
Lockformer Co., Chicago, Ill.
Maplewood Machinery Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, NIBBLING, HAND

Fenway Machine Sales Co., Inc., Philadelphia, Pa.
Heinrich Tools, Inc., Racine, Wis.
Nord Corp., Nutley, N. J.

MACHINES, SHEET METAL WORKING, NIBBLING, POWER

American Pullmax Co., Inc., Chicago, Ill.
Berkrov Products Co., Burbank, Calif.
Campbell Machine Div. American Chain & Cable Co., Inc., Bridgeport, Conn.
Libert Machine Co., Green Bay, Wis.
Nord Corp., Nutley, N. J.
St. Louis Tool Co., St. Louis, Mo.
Savage Co., W. J., Knoxville, Tenn.
Service Machine Co., Inc., Elizabeth, N. J.
Thor Power Tool Co., Aurora, Ill.
Wales-Strippit Corp., North Tonawanda, N. Y.

MACHINES, SHEET METAL WORKING, NOTCHING, MANUAL

Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
Fallsington Mfg. Co., Fallsington, Pa. (Also power)
Hendley & Whittemore Co., Beloit, Wis.
Kidder Mfg. Co., Inc., J. F., Burlington, Vt.
Merchandising and Mfg. Associates, Inc., Lancaster, Pa.
Nord Corp., Nutley, N. J.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Thor Tool & Die Co., San Leandro, Calif.
U. S. Tool & Die, Inc., Sharpsburg, Pa.
Whitney Metal Tool Co., Rockford, Ill.
Wildier Mfg. Co., Carmel, Calif.

MACHINES, SHEET METAL WORKING, NOTCHING, POWER

Harper Metal Products, Ltd., San Bruno, Calif.

MACHINES, SHEET METAL WORKING, PAN FORMING

Dreis & Krump Mfg. Co., Chicago, Ill.
Follansbee Steel Corp., Follansbee, W. Va.
Roliton of America, Inc., Phoenix, Ariz.
Smith, R. E., Waukegan, Ill.

MACHINES, SHEET METAL WORKING, PITTSBURGH LOCK FORMING

Flagler Corp., The, Detroit, Mich.
Lockformer Co., Chicago, Ill.
Maplewood Machinery Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, PITTSBURGH LOCK OPENING

Birks Mfg. Co., Meriden, Conn.
Fallsington Mfg. Co., Fallsington, Pa.
Maplewood Machinery Co., Chicago, Ill.

MACHINES, SHEET METAL WORKING, PRESSES

Airtherm Mfg. Co., St. Louis, Mo.
Allen Industries, Alva, Clinton, Mo.
Bath Co., Cyril, Solon, O.
Bertsch & Co., Cambridge City, Ind.
Benchmaster Mfg. Co., Gardena, Calif.
Cincinnati Shaper Co., Cincinnati, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Cleveland Punch & Shear Works Co., Cleveland, Ohio.

Davis & Son Machine Works, Los Angeles, Calif.
 Diamond Machine Tool Co., Pico, Calif.
 Doelger & Kirsten, Inc., Milwaukee, Wis.
 Dreis & Krump Mfg. Co., Chicago, Ill.
 Fallsington Mfg. Co., Fallsington, Pa.
 Famco Machine Co., Kenosha, Wis.
 Hardco Products, Wantagh, N. Y.
 Heidrich-Nourse Co., Los Angeles, Calif.
 Henry & Wright Div. Emhart Mfg. Co., Hartford, Conn.
 Highland Engineering Co., Santa Monica, Calif.
 Johnson Machine & Press Corp., Elkhart, Ind.
 Kenco Mfg. Co., Los Angeles, Calif.
 Leslie Welding Co., Inc., Chicago, Ill.
 New Albany Machine Mfg. Co., New Albany, Ind.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Pacific Industrial Mfg. Co., Oakland, Calif.
 Service Machine Co., Inc., Elizabeth, N. J.
 Swaine Mfg. Co., Fred J., St. Louis, Mo.
 Verson Allsteel Press Co., Chicago, Ill.
 Wales-Strippit Corp., North Tonawanda, N. Y.
 Ward Machinery Co., Chicago, Ill.
 Whitney Metal Tool Co., Rockford, Ill.
 Wiedemann Machine Co., Philadelphia, Pa.
 Wilson, Inc., K. R., Arcade, N. Y.
 Zeh & Hahnemann Co., Newark, N. J.

MACHINES, SHEET METAL WORKING, PUNCHES, POWER

Allen Industries, Alva, Clinton, Mo.
 Bath Co., Cyril, Solon, O.
 Cleveland Punch & Shear Works Co., Cleveland, Ohio.
 Davis & Son Machine Works, Los Angeles, Calif.
 Diamond Machine Tool Co., Pico, Calif.
 Doelger & Kirsten, Inc., Milwaukee, Wis.
 Excelsior Tool & Machine Co., East St. Louis, Ill.
 Fallsington Mfg. Co., Fallsington, Pa.
 Famco Machine Co., Kenosha, Wis.
 Hendley & Whittemore Co., Beloit, Wis.
 Henry & Wright Div. Emhart Mfg. Co., Hartford, Conn.
 Highland Engineering Co., Santa Monica, Calif.
 Kenco Mfg. Co., Los Angeles, Calif.
 Kling Bros. Engineering Works, Chicago, Ill.
 Marshalltown Mfg. Co., Marshalltown, Ia.
 Maxant Button & Supply Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Progressive Welder Sales Co., Detroit, Mich.
 Rotex Punch Co., Inc., San Leandro, Calif.
 Royersford Foundry & Machine Co., Royersford, Pa.
 Swaine Mfg. Co., Fred J., St. Louis, Mo.
 Verson Allsteel Press Co., Chicago, Ill.
 Wales-Strippit Corp., North Tonawanda, N. Y.
 Weiss & Co., H., New York, N. Y.
 Whitney Metal Tool Co., Rockford, Ill.
 Wiedemann Machine Co., Philadelphia, Pa.

MACHINES, SHEET METAL WORKING, ROD CUTTING

Beverly Shear Mfg. Co., Chicago, Ill.
 Diesel Power, Inc., Greenville, Pa.
 Hendley & Whittemore Co., Beloit, Wis.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Ould, Ltd., John, Mt. Vernon, N. Y.

MACHINES, SHEET METAL WORKING, SAWS, BAND, SHEET METAL CUTTING

Bett-Marr Mfg. Co., Hopkins, Minn.
 Delta Power Tool Div., Rockwell Mfg. Co., Pittsburgh, Pa.
 Disston & Sons, Inc., Henry, Philadelphia, Pa.
 DoALL Co., Des Plaines, Ill.
 Grob Inc., Grafton, Wis.
 Tannewitz Works, Grand Rapids, Mich.
 Wells Mfg. Corp., Three Rivers, Mich.

MACHINES, SHEET METAL WORKING, SAWS, CIRCULAR, SHEET METAL CUTTING

Aluminum Enterprises, Inc., Detroit, Mich.
 Kett Tool Co., Cincinnati, O.
 Tannewitz Works, Grand Rapids, Mich.

MACHINES, SHEET METAL WORKING, SAWS, HACK, POWER

Alpha Tool & Supply Co., Westwood, N. J.
 Champion Blower & Forge Co., Lancaster, Pa.

Disston & Sons, Inc., Henry, Philadelphia, Pa.
 Merchandising & Mfg. Associates, Inc., Lancaster, Pa.
 Racine Hydraulics & Machinery, Inc., Racine, Wis.
 Robertson, F. L., Buffalo, N. Y.
 Royersford Foundry & Machine Co., Royersford, Pa.
 Skil Corporation, Chicago, Ill.
 Thor Power Tool Co., Aurora, Ill.

MACHINES, SHEET METAL WORKING, SEAMING, HAND

Enderle, Inc., Ltd., Frank X., Los Angeles, Calif.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, SEAMING, POWER

Bliss Co., E. W., Detroit, Mich.
 Hardco Products, Wantagh, N. Y.
 Lockformer Co., Chicago, Ill.
 Maplewood Machinery Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Progressive Welder Sales Co., Detroit, Mich.
 Speed-Seam Co., Chicago, Ill.
 Stamco, Inc., New Bremen, Ohio.
 Swaine Mfg. Co., Fred J., St. Louis, Mo.

MACHINES, SHEET METAL WORKING, SETTING DOWN, HAND

Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, SETTING DOWN, POWER

Fallsington Mfg. Co., Fallsington, Pa.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, SHAPE FORMING, POWER

For Mouldings and Shapes

Dahlstrom Machine Works, Chicago, Ill.
 Hendley & Whittemore Co., Beloit, Wis.
 Kane & Roach, Inc., Syracuse, N. Y.
 Lockformer Co., Chicago, Ill.
 Maplewood Machinery Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Wysong & Miles Co., Greensboro, N. C.
 Yoder Co., Cleveland, Ohio.

MACHINES, SHEET METAL WORKING, SHEARS, ANGLE IRON

Bateman Foundry & Machine Co., Mineral Wells, Tex.
 Kidder Mfg. Co., Inc., J. F., Burlington, Vt.

MACHINES, SHEET METAL WORKING, SHEARS, CIRCLE, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
 Berkroy Products Co., Burbank, Calif.
 Klenk's Aviation Snips, Wilmington, Del.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, SHEARS, CIRCLE, POWER

American Pullmax Co., Inc., Chicago, Ill.
 H. A. Mfg. Co., York, Pa.
 Kling Bros. Engineering Works, Chicago, Ill.
 Libert Machine Co., Green Bay, Wis.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Wales-Strippit Corp., North Tonawanda, N. Y.

MACHINES, SHEET METAL WORKING, SHEARS, ELECTRIC, PORTABLE

Black & Decker Mfg. Co., Towson, Md.
 Fenway Machine Sales Co., Inc., Philadelphia, Pa.
 Mall Tool Co., Chicago, Ill.
 Merchandising & Manufacturing Associates, Inc., Lancaster, Pa.
 (Electric or pneumatic drill attachment)

Millers Falls Co., Greenfield, Mass.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Skil Corporation, Chicago, Ill.
 Stanley Electric Tool Div., Stanley Works, New Britain, Conn.
 Wilder Mfg. Co., Inc., Carmel, Calif.

MACHINES, SHEET METAL WORKING, SHEARS, ROTARY, SLITTING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
 Berkroy Products Co., Burbank, Calif.
 Champion Blower & Forge Co., Lancaster, Pa.
 Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
 Fidelity Tool Supply, Inc., Camden, N. J.
 Marshalltown Mfg. Co., Marshalltown, Iowa.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Ward Machinery Co., Chicago, Ill.
 Whitney Mfg. Co., W. A., Rockford, Ill.

MACHINES, SHEET METAL WORKING, SHEARS, ROTARY, SLITTING, POWER

American Pullmax Co., Inc., Chicago, Ill.
 Kling Bros. Engineering Works, Chicago, Ill.
 Marshalltown Mfg. Co., Marshalltown, Iowa.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Stanat Mfg. Co., Inc., Long Island City, N. Y.
 Stanley Electric Tool Div., Stanley Works, New Britain, Conn.
 Wilder Mfg. Co., Inc., Carmel, Calif.

MACHINES, SHEET METAL WORKING, SHEARS, SQUARING, MANUAL

Acme Equipment Co., Inc., Chicago, Ill.
 Barth Engineering & Mfg. Co., Milldale, Conn.
 Diamond Machine Tool Co., Pico, Calif.
 Highland Engineering Co., Santa Monica, Calif.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Whitney Metal Tool Co., Rockford, Ill.
 Wysong & Miles Co., Greensboro, N. C.

MACHINES, SHEET METAL WORKING, SHEARS, SQUARING, POWER

Acme Equipment Co., Inc., Chicago, Ill.
 Barth Engineering & Mfg. Co., Milldale, Conn.
 Bertsch & Co., Cambridge City, Ind.
 Cincinnati Shaper Co., Cincinnati, Ohio.
 Cleveland Crane & Engineering Co., Wickliffe, Ohio.
 Diamond Machine Tool Co., Pico, Calif.
 Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
 Famco Machine Co., Kenosha, Wis.
 H. A. Mfg. Co., York, Pa.
 Johnson Machine & Press Corp., Elkhart, Ind.
 Manchester Machine Corp., The, Manchester, Conn.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Pacific Industrial Mfg. Co., Oakland, Calif.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Stamco, Inc., New Bremen, Ohio.
 Verson Allsteel Press Co., Chicago, Ill.
 Whitney Metal Tool Co., Rockford, Ill.
 Wilder Mfg. Co., Inc., Carmel, Calif.
 Wysong & Miles Co., Greensboro, N. C.

MACHINES, SHEET METAL WORKING, SLIP ROLL FORMING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
 Berkroy Products Co., Burbank, Calif.
 Hendley & Whittemore Co., Beloit, Wis.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Peck, Stow & Wilcox Co., Southington, Conn.
 San Angelo Foundry & Machine Co., San Angelo, Tex.
 Wysong & Miles Co., Greensboro, N. C.

MACHINES, SHEET METAL WORKING, SLIP ROLL FORMING, POWER

Bertsch & Co., Cambridge City, Ind.
 Fallsington Mfg. Co., Fallsington, Pa.
 Hendley & Whittemore Co., Beloit, Wis.
 Kling Bros. Engineering Works, Chicago, Ill.
 Maplewood Machinery Co., Chicago, Ill.

Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Reed Equipment Div., The Webb Corp., Webb City, Mo.
 San Angelo Foundry & Machine Co., San Angelo, Tex.
 Wysong & Miles Co., Greensboro, N. C.

MACHINES, SHEET METAL WORKING, SLITTING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
 Berkroy Products Co., Burbank, Calif.
 Beverly Shear Mfg. Co., Chicago, Ill.
 Hendley & Whittemore Co., Beloit, Wis.
 Kidder Mfg. Co., Inc., J. F., Burlington, Vt.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 Ward Machinery Co., Chicago, Ill.
 Whitney Mfg. Co., W. A., Rockford, Ill.
 Whitney Metal Tool Co., Rockford, Ill.

MACHINES, SHEET METAL WORKING, SLITTING, POWER

Dahlstrom Machine Works, Chicago, Ill.
 Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
 Hendley & Whittemore Co., Beloit, Wis.
 Kane & Roach, Inc., Syracuse, N. Y.
 Libert Machine Co., Green Bay, Wis.
 Lockformer Co., Chicago, Ill.
 Maplewood Machinery Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.
 St. Louis Tool Co., St. Louis, Mo.
 Stamco, Inc., New Bremen, Ohio.
 Stanat Mfg. Co., Inc., Long Island City, N. Y.
 Wilder Mfg. Co., Inc., Carmel, Calif.
 Yoder Co., Cleveland, Ohio.

MACHINES, SHEET METAL WORKING, WIRING, HAND

Barth Engineering & Mfg. Co., Milldale, Conn.
 Maplewood Machinery Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.

MACHINES, SHEET METAL WORKING, WIRING, POWER

Maplewood Machinery Co., Chicago, Ill.
 Niagara Machine & Tool Works, Buffalo, N. Y.
 Peck, Stow & Wilcox Co., Southington, Conn.

MALLETS, METAL WORKING

Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y. (Lead)
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
 Chicago Rawhide Mfg. Co., Chicago, Ill. (Rawhide)
 Division Lead Co., Summit, Ill. (Lead)
 Greene, Tweed & Co., New York, N. Y. (Plastic, rawhide, composition, copper & babbitt)
 Hi-Lok Mfg. Co., Akron, O. (Aluminum, steel, brass, copper, plastic, nylon)
 Lignum-Vitae Products Corp., Jersey City, N. J.
 Maplewood Machinery Co., Chicago, Ill.
 New Plastic Corp., Hollywood, Calif. (Plastic)
 Niagara Machine & Tool Works, Buffalo, N. Y. (Hickory)
 Republic Rubber Div. Lee Rubber & Tire Corp., Youngstown, Ohio. (Rubber)
 Stanley Electric Tools Div., The Stanley Works, New Britain, Conn. (Plastic)
 Stossel & Sons Co., Carl, Front Royal, Va. (Hickory & dog-wood)

MARQUEES, PREFABRICATED

See Canopies, Prefabricated

MATS, EVAPORATIVE COOLER

Alton Mfg. Co., Dallas, Texas. (Aspenwood and Rubberized)
 International Metal Products Co., Phoenix, Ariz. (Chemically treated aspen fiber)
 Morey, Dan, Los Angeles, Calif. (Aspen)
 Palmer Excelsior, Inc., Phoenix, Ariz. (Aspen)
 Western Wood Excelsior Mfg. Co., Phoenix, Ariz.

METAL CEILINGS

See Ceilings, Metal

METAL HOSE

See Hose and Fittings, Metal

METAL SPRAY GUNS

See Guns, Spray, Metals

METAL STAMPINGS

See Stampings, Metal

METALS, PERFORATED, SHEET AND PLATE

Auer Register Co., Cleveland, O.
Beckley Perforating Co., Garwood, N. J.
Belmont Smelting & Refining Wks., Inc., Brooklyn, N. Y.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Perforating Co., Chicago, Ill.
Cross Engineering Co., Carbondale, Pa.
Diamond Mfg. Co., Wyoming, Pa.
Division Lead Co., Summit, Ill.
Erdle Perforating Co., Rochester, N. Y.
Harrington & King Perforating Co., Chicago, Ill.
Harrison Sheet Steel Co., Chicago, Ill.
Hendrick Mfg. Co., Carbondale, Pa.
Johnston & Chapman Co., Chicago, Ill.
Littleford Bros., Inc., Cincinnati, Ohio.
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.
Miller & Doing, Brooklyn, N. Y.
Mundt & Sons, Charles, Jersey City, N. J.
Nortmann-Duffke Co., Milwaukee, Wis.
Penn Metal Co., Inc., New York, N. Y.
Reynolds Metals Co., Louisville, Ky.
Rigidized Metals Corp., Buffalo, N. Y.
Standard Stamping & Perforating Co., Chicago, Ill.
Superior Metal Fabricating Co., Niles, Ohio.
Wheeling Corrugating Co., Wheeling, W. Va.

METERS, AIR VELOCITY, DIRECT READING

Anemostat Corp. of America, New York, N. Y.
Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Detroit Air Conditioning Service Co., Nashville, Mich.
Illinois Testing Laboratories, Inc., Chicago, Ill.
Taylor Instrument Companies, Rochester, N. Y.

METERS, SOUND LEVEL

Scott, Inc., Herman Hosmer, Cambridge, Mass.

MONORAIL SYSTEMS

Track, Trolley, Hoist, Accessories

American MonoRail Co., Cleveland, Ohio.
Chicago Tramrail Co., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Reading Crane & Hoist Corp., Reading, Pa.
Richards-Wilcox Mfg. Co., Aurora, Ill.
Shepard Niles Crane & Hoist Corp., Montour Falls, N.Y.
Webb Co., Jervis B., Detroit, Mich.

MOTOR TRUCKS

See Trucks, Motor

MOTORS, ELECTRIC, DUCT, DAMPER, MODULATING OR PROPORTIONING

See Controls, Motor, Duct Damper, Modulating or Proportioning

MOTORS, ELECTRIC, DUCT, DAMPER, TWO POSITION

See Controls, Motor, Duct Damper, Two Position

MOTORS, ELECTRIC, FRACTIONAL H.P.

ACEC Electric Corp., New York, N. Y.
Baldor Electric Co., St. Louis, Mo.
Barber-Colman Co., Rockford, Ill.
Bodine Electric Co., Chicago, Ill.
Brown-Brockmeyer Co., Inc., Dayton, Ohio.
Century Electric Co., St. Louis, Mo.
Crisse Controls Div., Acro Mfg. Co., Columbus, Ohio.
Delco Appliance Div. General Motors Corp., Rochester, N. Y.
Delco Products Div. General Motors Corp., Dayton, Ohio.
Delta Power Tool Div., Rockwell Mfg. Co., Pittsburgh, Pa.
Diehl Mfg. Co., Somerville, N. J.
Electric Motor Corp., Div., Howard Industries, Inc., Racine, Wis.
Electric Motors & Specialties, Inc., Garrett, Ind.
Emerson Electric Mfg. Co., St. Louis, Mo.
Fasco Industries, Inc., Rochester, N. Y.
Franklin Electric Co., Inc., Bluffton, Ind.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Holtzer-Cabot Motor Div., National Pneumatic Co., Inc., Boston, Mass.

Hoover Co., The, Electric Motor Div., North Plainfield, N. J.
Howard Industries, Inc., Racine, Wis.
International Register Co., Chicago, Ill.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Jack & Heintz, Inc., Cleveland, Ohio.
Lamb Electric Co., Kent, Ohio.
Leland Electric Co., Div. American Machine & Foundry Co., Dayton, Ohio.

Lima Electric Motor Co., The, Lima, O.
Marathon Electric Mfg. Corp., Wausau, Wis.
Marble-Card Electric Corp., Gladstone, Mich.
Marco Industries, Inc., Womelsdorf, Pa.
Master Appliance Mfg. Co., Racine, Wis.
Master Electric Co., Dayton, Ohio
Morey, Dan, Los Angeles, Calif.
Morrill Motors, Ft. Wayne, Ind.
Ohio Electric Mfg. Co., Cleveland, Ohio.
Packard Electric Div., General Motors, Corp., Warren, Ohio.
Peerless Electric Co., Warren, Ohio.
Redmond Distributors, Inc., Owosso, Mich.
Reuland Elec. Co., Alhambra, Calif.
Reynolds Electric Co., River Grove, Ill.
Robbins & Myers, Inc., Springfield, Ohio.
Rotor Corp., Dayton, Ohio.
Small Motors, Inc., Chicago, Ill.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Speedway Mfg. Co., Div. of Thor Power Tool Co., Chicago, Ill.
Sutton Corp., O. A., Wichita, Kans.
Torq Electric Corp., Bedford, Ohio.
U.S. Electrical Motors, Inc., Los Angeles, Calif.
Universal Electric Co., Owosso, Mich.
Universal Electric Western Co., Colorado Springs, Colo.
Wagner Electric Corp., St. Louis, Mo.
Westinghouse Electric Corp., Pittsburgh, Pa.

MOTORS, ELECTRIC, 1 H.P. AND OVER

ACEC Electric Corp., New York, N. Y.
Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Allis Co., Louis, Milwaukee, Wis.
Armor Electric Co., Erie, Pa.
Baldor Electric Co., St. Louis, Mo.
Brown-Brockmeyer Co., Inc., Dayton, Ohio.
Century Electric Co., St. Louis, Mo.
Crocker-Wheeler Div. Elliott Co., Ampere, N. J.
Delco Products Div., General Motors Corp., Dayton, Ohio.
Delta Power Tool Div., Rockwell Mfg. Co., Pittsburgh, Pa.
Diehl Mfg. Co., Somerville, N. J.
Electric Machinery Mfg. Co., Minneapolis, Minn.
Electro Dynamic Div., General Dynamics Corp., Bayonne, N. J.
Emerson Electric Mfg. Co., St. Louis, Mo.
Fairbanks, Morse & Co., Chicago, Ill.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Hoover Co., The, Electric Motor Div., North Plainfield, N. J.
Ideal Electric & Mfg. Co., Mansfield, Ohio.
Imperial Electric Co., Akron, Ohio.
Leland Electric Co., Div. American Machine & Foundry Co., Dayton, Ohio.
Lima Electric Motor Co., The, Lima, O.
Marathon Electric Mfg. Corp., Wausau, Wis.
Marble-Card Electric Corp., Gladstone, Mich.
Master Electric Co., Dayton, Ohio.
Newman Industries America Inc., New York, N. Y.
Peerless Electric Co., Warren, Ohio.
Philadelphia Gear Works, Inc., Philadelphia, Pa.
Reliance Elec. & Engr. Co., Cleveland, Ohio.
Reuland Electric Co., Alhambra, Calif.
Robbins & Meyers, Inc., Springfield, Ohio.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Star-Kimble Motor Div., Michle Printing Press & Mfg. Co., Bloomfield, N.J.
Sterling Electric Motors, Inc., Los Angeles, Calif.
U. S. Electrical Motors, Inc., Los Angeles, Calif.
Valley Electric Co., St. Louis, Mo.
Wagner Electric Corp., St. Louis, Mo.
Westinghouse Electric Corp., Pittsburgh, Pa.

MOULDINGS AND TRIM, ORNAMENTAL, CABINET AND CASING

Aluminum Co. of America, Pittsburgh, Pa.
Aluminum Goods Mfg. Co., Manitowoc, Wis.
American Insulator Corp., New Freedom, Pa.
Brasco Mfg. Co., Harvey, Ill.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Detroit Moulding Div., L. A. Young Spring & Wire Corp., Detroit, Mich.

Empire Door Co., Inc., New York, N. Y.
 Jamestown Metal Corp., Jamestown, N. Y.
 Kawneer Co., Niles, Mich.
 Lynch & Sons, Kenneth, Wilton, Conn.
 Miller & Doing, Brooklyn, N. Y.
 Pyramid Mouldings, Inc., Chicago, Ill.
 Revere Copper & Brass Inc., New York, N. Y.
 Rigidized Metals Corp., Buffalo, N. Y.
 Speed Metals Inc., Rockford, Ill.
 Tennessee Fabricating Co., Memphis, Tenn.
 Werner Co., Inc., R. D., New York, N. Y.

MOULDINGS AND TRIM FOR SIDING, SHINGLES AND STORE FRONTS

Allmetal Weatherstrip Co., Chicago, Ill. (Zinc)
 Appleton Supply Co., Inc., Appleton, Wis. (Aluminum, zinc)
 Coco Steel Products Corp., Chicago, Ill.
 Edwards Mfg. Co., Inc., Cincinnati, Ohio.
 Inland Steel Products Co., Milwaukee, Wis. (Corners)
 Klauer Mfg. Co., Dubuque, Iowa.
 Matthiessen & Hegeler Zinc Co., LaSalle, Ill.
 Penn Supply & Metal Corp., Philadelphia, Pa.
 Quaker State Metals Co., Lancaster, Pa.
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y. (Bull nose corner bead)
 Sioux Steel Co., Sioux Falls, S. Dak.
 Trimedge of Ga., Inc., Newman, Ga.
 Werner Co., R. D., Inc., New York, N. Y.

NAILS, ALUMINUM

Aluminum Co. of America, Pittsburgh, Pa.
 Dickson Weatherproof Nail Co., Evanston, Ill.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Independent Nail & Packing Co., Bridgewater, Mass.
 Kaiser Aluminum & Chemical Corp., Oakland, Calif.
 Maze Co., W. H., Peru, Ill.
 Nichols Wire & Aluminum Co., Davenport, Iowa.
 Quaker State Metals Co., Lancaster, Pa.
 Reynolds Metals Co., Louisville, Ky.

NAILS, BRASS OR COPPER

American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Hussey & Co., C. G., Pittsburgh, Pa.
 Independent Nail & Packing Co., Bridgewater, Mass.
 Maze Co., W. H., Peru, Ill.

NAILS, HARDENED MASONRY

American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Dickson Weatherproof Nail Co., Evanston, Ill.
 Hillwood Mfg. Co., Cleveland, Ohio.
 Independent Nail & Packing Co., Bridgewater, Mass.
 Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.
 Powder Power Tool Corp., Portland, Ore.
 Tremont Nail Co., Wareham, Mass.
 Wheeling Corrugating Co., Wheeling, W. Va.
 Wood Steel Co., Alan, Conshohocken, Pa.

NAILS, ROOFING

American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio. (Galv)
 Bethlehem Steel Co., Bethlehem, Pa.
 Coco Steel Products Corp., Chicago, Ill. (Steel)
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa.
 Deniston Co., Chicago, Ill. (Steel & aluminum)
 Dickson Weatherproof Nail Co., Evanston, Ill. (Lead headed)
 Division Lead Co., Summit, Ill. (Lead)
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Copper)
 Hassall, Inc., John, Westbury, L. I., N. Y. (Copper)
 Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
 Independent Nail & Packing Co., Bridgewater, Mass.
 Jones & Laughlin Steel Corp., Pittsburgh, Pa.
 Kaiser Aluminum & Chemical Corp., Oakland, Calif. (Aluminum)
 Maze Co., W. H., Peru, Ill.

Pittsburgh Steel Co., Pittsburgh, Pa.
 Quaker State Metals Co., Lancaster, Pa. (Aluminum)
 Republic Steel Corp., Cleveland, Ohio. (Steel)
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
 Wood Steel Co., Alan, Conshohocken, Pa. (Steel)

NAILS, SCREW, HARDENED

American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Deniston Co., Chicago, Ill. (Pallet)
 Dickson Weatherproof Nail Co., Evanston, Ill.
 Hillwood Mfg. Co., Cleveland, Ohio. (Drive)
 Independent Nail & Packing Co., Bridgewater, Mass.
 Industrial Screw Co., Chicago, Ill.
 Maze Co., W. H., Peru, Ill.
 Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.
 Pittsburgh Steel Co., Pittsburgh, Pa.

NAILS, STAINLESS STEEL

Allmetal Screw Products Co., Inc., Garden City, N. Y.
 American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Dickson Weatherproof Nail Co., Evanston, Ill.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Independence Nail & Packing Co., Bridgewater, Mass.
 Maze Co., W. H., Peru, Ill.
 Star Stainless Screw Co., Paterson, N. J.
 Tremont Nail Co., Wareham, Mass.

NAILS, ZINC COATED

American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
 Bethlehem Steel Co., Bethlehem, Pa.
 Dickson Weatherproof Nail Co., Evanston, Ill.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Independent Nail & Packing Co., Bridgewater, Mass.
 Jones & Laughlin Steel Corp., Pittsburgh, Pa.
 Maze Co., W. H., Peru, Ill.
 New Delphos Mfg. Co., Delphos, Ohio.
 Republic Steel Corp., Cleveland, Ohio.
 Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
 Tremont Nail Co., Wareham, Mass.
 Wheeling Corrugating Co., Wheeling, W. Va.

NIBBLERS

See Machines, Sheet Metal Working, Nibbling; Machines, Sheet Metal Working, Shears, Electric

NICKEL AND NICKEL ALLOY SHEETS

See Sheets, Metal, Special Metal

NIGHT AIR FANS

See Fans, Night Air Cooling

NOTCHERS

See Machines, Sheet Metal Working, Notching

NOTCHERS, DRIVE CLEAT

See Punches, Bench

NOZZLES, OIL BURNER

Balloffet Nozzle Co., Inc., Guttenberg, N. J.
 Benjamin Air Rifle Co., St. Louis, Mo.
 Boston Machine Works Co., Lynn, Mass. (Also nozzle kit)
 Delavan Mfg. Co., West Des Moines, Iowa.
 Hago Products, Irvington, N. J.
 Harvey, Inc., Sid, Valley Stream, N. Y.
 Hasko Utilities Co., New York, N. Y.
 Monarch Mfg. Works, Inc., Philadelphia, Pa.
 Steinen Mfg. Co., Wm., Newark, N. J.

NOZZLES, SPRAY, WATER

American Cooling Tower Co., Kansas City, Mo.
 Benjamin Air Rifle Co., St. Louis, Mo.
 Binks Mfg. Co., Chicago, Ill.
 Buffalo Forge Co., Buffalo, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Chain Belt Co., Milwaukee, Wis.
 Clarage Fan Co., Kalamazoo, Mich.
 Delavan Mfg. Co., West Des Moines, Iowa.
 Eddington Metal Specialty Co., Eddington, Pa.

Maid-O'-Mist, Inc., Chicago, Ill.
 Monarch Mfg. Works, Inc., Philadelphia, Pa.
 Plummer Spray Equipment Co., Napoleon, Ohio.
 Rega Mfg. Co., Rochester, N. Y.
 Ross Sprinkler Co., Rosemead, Calif.
 Schutte and Koerting Co., Cornwells Heights, Bucks Co., Pa.
 Spray Engineering Co., Somerville, Mass.
 Spraying Systems Co., Bellwood, Ill.
 Stearns Co., N. C., Shreveport, La.
 Steinen Mfg. Co., Wm., Newark, N. J.
 Supreme Electric Products Corp., Rochester, N. Y.
 TOT Towers, Inc., Houston, Tex.
 Tinnerman Products, Inc., Cleveland, O.
 Water Cooling Equipment Corp., St. Louis, Mo.
 Yarnall-Waring Co., Philadelphia, Pa.

NUTS, PRONGED

Fox Products Co., Philadelphia, Pa.

ODOR ADSORBERS

See Adsorbers, Odor

OIL BURNER CONTROLS

See Controls, Control Systems

OIL BURNER PARTS

See Burner Parts, Oil

OIL BURNER REPAIR TOOLS

See Tools, Oil Burner Repair

OIL BURNERS

See Burners, Conversion, Oil

ORNAMENTS, SHEET METAL

See Mouldings and Trim, Ornamental

PACKAGED SYSTEMS

See Systems, Heating, Small Pipe

PADS, EVAPORATIVE COOLER

See Mats, Evaporative Cooler

PAINT, ROOFING

American-Marietta Co., Chicago, Ill.
 Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
 (Pitch base)
 Blue Ridge Talc Co., Inc., Henry, Va.
 Cabot, Inc., Samuel, Boston, Mass.
 Calbar Paint & Varnish Co., Philadelphia, Pa.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Carter Paint Co., Liberty, Ind.
 Certain-teed Products Corp., Ardmore, Pa.
 Champion Bronze Powder & Paint Co., Chicago, Ill.
 Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
 Continental Products Co., Euclid, Ohio.
 Coopers Creek Chemical Corp., West Conshohocken, Pa.
 Debevoise Co., Brooklyn, N. Y.
 Devoe & Reynolds Co., Inc., New York, N. Y.
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
 Flintkote Co., New York, N. Y.
 Hetzel Roofing Products Co., Inc., Newark, N. J.
 Horn Co., Inc., A. C., Long Island City, N. Y.
 Illinois Bronze Powder Co., Inc., Chicago, Ill.
 Inter-Coastal Paint Co., East St. Louis, Ill.
 Iowa Paint Mfg. Co., Inc., Des Moines, Iowa. (Asphalt)
 Koppers Co., Inc., Pittsburgh, Pa.
 Lastik Products Co., Inc., Pittsburgh, Pa. (Asphalt & fiber)
 Lexsuco, Inc., Cleveland, Ohio.
 Metropolitan Refining Co., Inc., Long Island City, N. Y.
 Midland Paint & Varnish Co., Cleveland, Ohio.
 National Mfg. Corp., Tonawanda, N. Y.
 Nebel Mfg. Co., Cleveland, Ohio.
 North American Mogul Products Co., Cleveland, Ohio.
 Ohmlac Paint & Refining Co., Chicago, Ill. (Asphalt)
 Pabco Products, Inc., San Francisco, Calif.
 Pecora Paint Co., Philadelphia, Pa.
 Pittsburgh Plate Glass Co., Pittsburgh, Pa.
 Presstite Engineering Co., St. Louis, Mo.
 Reilly Tar & Chemical Corp., Indianapolis, Ind.
 Ruberoid Co., New York, N. Y.
 Rutland Fire Clay Co., Rutland, Vt. (Asphalt)
 S. O. S. Products Co., Inc., Brooklyn, N. Y.
 Sherwin-Williams Co., Cleveland, Ohio.
 Sipe & Co., James B., Pittsburgh, Pa.

Sonneborn Sons, Inc., L., New York, N. Y.
 Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc., Savannah, Ga.
 Tamms Industries Inc., Chicago, Ill.
 Thompson & Co., Oakmont, Pa.
 Tropical Paint Co., Cleveland, Ohio.
 Truscon Laboratories, Detroit, Mich.
 Whitlam Mfg. Co., J. C., Wadsworth, O.

PAINT, SHEET METAL

Aluminum, Finish Coat, Prime Coat, etc.

American-Marietta Co., Chicago, Ill. (Aluminum, prime & finish coat)
 Arco Co., The, Cleveland, O.
 Atlas Powder Co., North Chicago, Ill.
 Babbitt Chemical Specialties Co., New Bedford, Mass. (Aluminum, finish coat)
 Barreled Sunlight Paint Co., Providence, R.I. (Aluminum, finish coat)
 Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
 Blue Ridge Talc Co., Inc., Henry, Va.
 Cabot, Inc., Samuel, Boston, Mass. (Aluminum, metal protecting)
 Calbar Paint & Varnish Co., Philadelphia, Pa. (Aluminum, finish coat)
 Carboline Co., St. Louis, Mo. (Aluminum, finish coat & prime coat)
 Carey Co., Philip, Cincinnati, Ohio. (Aluminum)
 Carter Paint Co., Liberty, Ind. (Finish coat)
 Champion Bronze Powder & Paint Co., Chicago, Ill. (Self-spraying bombs, all colors)
 Chase Products, Inc., Broadview, Ill.
 Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
 Chemical Solvent Co., Birmingham, Ala.
 Continental Products Co., Euclid, Ohio. (Aluminum, finish coat)
 Coopers Creek Chemical Corp., West Conshohocken, Pa. (Aluminum, finish coat)
 Cordo Chemical Corp., Norwalk, Conn. (Acid and alkali resistant coatings)
 Corrosite Corp., Brooklyn, N. Y. (Plastic)
 Debevoise Co., Brooklyn, N. Y. (Prime coat & finish coat)
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del. (Aluminum, prime coat & finish coat)
 Flintkote Co., New York, N. Y. (Aluminum)
 Flood Co., Hudson, Ohio.
 Galvicon Corp., New York, N. Y.
 Glidden Co., Cleveland, Ohio. (Aluminum finish coat, prime coat)
 Hague & Co., Inc., Alfred, Brooklyn, N. Y. (Aluminum, finish coat)
 Hetzel Roofing Products Co., Inc., Newark, N. J. (Aluminum, finish coat)
 Hilo Varnish Corp., Everett, Mass. (Zinc chromate)
 Horn Co., Inc., A. C., Long Island City, N. Y. (Aluminum, finish coat)
 Illinois Bronze Powder Co., Inc., Chicago, Ill. (Aluminum)
 Industrial Metal Protectives, Dayton, O.
 Inter-Coastal Paint Co., East St. Louis, Ill. (Prime coat, finish coat & sound deadening)
 Iowa Paint Mfg. Co., Inc., Des Moines, Ia.
 Koppers Co., Inc., Pittsburgh, Pa. (Aluminum, finish coat)
 Lastik Products Co., Inc., Pittsburgh, Pa. (Aluminum, prime coat & finish coat)
 Midland Paint & Varnish Co., Cleveland, Ohio. (Aluminum, finish coat)
 Miracle Adhesives Corp., New York, N. Y.
 Morris Paint & Varnish Co., Omaha, Nebr.
 National Engineering Products, Inc., Washington, D. C.
 National Lead Co., New York, N. Y. (Prime, finish coat)
 National Mfg. Corp., Tonawanda, N. Y. (Aluminum)
 Nebel Mfg. Co., Cleveland, Ohio. (Aluminum, finish coat)
 North American Mogul Products Co., Cleveland, Ohio. (Finish coat)
 Ohmlac Paint & Refining Co., Chicago, Ill. (Finish coat)
 Pabco Products Inc., San Francisco, Calif. (Aluminum, prime coat & finish coat)
 Pecora Paint Co., Philadelphia, Pa. (Aluminum, finish coat)
 Petroleum Chemicals, Inc., Fresno, Calif.
 Pittsburgh Plate Glass Co., Pittsburgh, Pa. (Aluminum, finish coat)
 Presstite Engineering Co., St. Louis, Mo. (Aluminum)
 Quigley Co., Inc., New York, N. Y. (Aluminum, finish coat)
 Reilly Tar & Chemical Corp., Indianapolis, Ind.
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Rust-Oleum Corp., Evanston, Ill. (Aluminum, prime coat, finish coat & rust preventive coatings)
 Rutland Fire Clay Co., Rutland, Vt. (Prime coat)
 S. O. S. Products Co., Inc., Brooklyn, N. Y. (Aluminum)

Sherwin-Williams Co., Cleveland, Ohio. (Aluminum)
 Sipe & Co., James B., Pittsburgh, Pa. (Aluminum, prime coat & finish coat)
 Slip-On, Inc., New York, N. Y.
 Sonneborn Sons, Inc., L., New York, N. Y. (Aluminum, finish coat)
 Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc., Savannah, Ga.
 Speco, Inc., Cleveland, Ohio (Aluminum)
 Sprayon Products, Inc., Cleveland, O. (Spray)
 Tamms Industries, Inc., Chicago, Ill. (Finish coat)
 Tennessee Fabricating Co., Memphis, Tenn. (Finish coat)
 Thompson & Co., Oakmont, Pa. (Aluminum, finish coat)
 Tropical Paint Co., Cleveland, Ohio. (Aluminum, finish coat)
 Truscon Laboratories, Detroit, Mich. (Aluminum, prime coat & finish coat)
 United Chromium, Inc., New York, N. Y. (Aluminum, prime coat, finish coat)
 United Gilsonite Laboratories, Scranton, Pa.
 United States Stoneware Co., New York, N. Y. (Aluminum, finish coat)
 Whitlam Mfg. Co., J. C., Wadsworth, O. (Aluminum, prime coat, finish coat)
 Wilbur & Williams Co., Brighton, Mass. (Aluminum, prime coat, finish coat)

PAINT SPRAY GUNS

See Guns, Spray, Paint

PANEL BOARDS

See Boards, Panel and Control

PANELS, CURTAIN WALL, PREFABRICATED

Celotex Corp., Chicago, Ill.
 Cemenstone Corp., Neville Island, Pittsburgh, Pa.
 Davidson Enamelled Products, Inc., Lima, O.
 Detroit Steel Products Co., Detroit, Mich.
 Erie Enameling Co., Erie, Pa.
 General Bronze Corp., Garden City, L.I., N.Y.
 Ingram-Richardson Mfg. Co., Beaver Falls, Pa.
 Inland Steel Products Co., Milwaukee, Wis.
 Johns-Manville, New York, N. Y.
 Knapp Bros. Mfg. Co., Cincinnati, O.
 Mahon Co., R. C., Detroit, Mich.
 Reynolds Metals Co., Louisville, Ky.
 Robertson Co., H.H., Pittsburgh, Pa.
 Speed Metals Inc., Rockford, Ill.
 Steelcraft Mfg. Co., Rossmoyne, O.

PANELS, HEATING, ELECTRIC

Berko Electric Mfg. Corp., Queens Village, N. Y.
 Electrigras Corp., Bergenfield, N. J.
 Electromode Div. of Commercial Controls, Rochester, N. Y.
 Everwarm, Inc., Knoxville, Tenn.
 International Oil Burner Co., St. Louis, Mo.
 Marviray, Inc., Newark, N. J.
 Sunwarm, Inc., Kingsport, Tenn.

PANELS, PLASTIC, TRANSLUCENT MATERIAL

Alsynite Co. of America, San Diego, Calif.
 American Cyanamid Co., New York, N. Y.
 American Insulator Corp., New Freedom, Pa.
 American Panel, Inc., Pittsburgh, Pa.
 Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
 Campco Div., Chicago Molded Products Corp., Chicago, Ill.
 Chemold Co., Santa Monica, Calif.
 International Molded Plastics, Inc., Cleveland, O.
 L. O. F Glass Fibers Co., Toledo, O.
 Lynch Asbestos Co., Los Angeles, Calif.
 Monsanto Chemical Co., St. Louis, Mo.
 Pennsylvania Wire Glass Co., Philadelphia, Pa.
 Resolite Corp., Zelienople, Pa.
 Seiberling Rubber Co., Plastics Div., Newcomerstown, O.

PANELS, WINDOW, AIR CONDITIONER

Russell Co., F. C., Cleveland, O.

PAPER, ASBESTOS

Acme Asbestos Covering & Flooring Co., Chicago, Ill.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Ehret Magnesia Mfg. Co., Valley Forge, Pa.
 Johns-Manville, New York, N. Y.
 Keasbey & Mattison Co., Ambler, Pa.
 Norristown Magnesia & Asbestos Co., Norristown, Pa.
 Ruberoid Co., New York, N. Y.
 Sall Mountain Co., Hamilton, Ohio.
 Standard Asbestos Mfg. Co., Chicago, Ill.
 Wilson, Inc., Grant, Chicago, Ill.

PAPER AND MEMBRANE, FOR CRAWL SPACE AND SUBFILL

See Barriers, Vapor

PARTS, REPAIR, FURNACE AND STOVE

Adams Co., Dubuque, Iowa.
 Brauer Supply Co., A. G., St. Louis, Mo.
 Central Furnace & Stove Repair Co., St. Louis, Mo.
 Cincinnati Stamping & Furnace Co., Cincinnati, Ohio.
 Eselgroth & Co., Newark, N. J.
 Foote Foundry Co., I. B., Fredericktown, Ohio.
 Kehm Co., Chicago, Ill.
 Kramer Bros. Foundry Co., Dayton, Ohio.
 Livingston, Inc., Marshall, Mich.
 Metzner Stove and Furnace Supply Co., Kansas City, Mo.
 Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Ill.
 National Foundry & Furnace Co., Dayton, Ohio.
 Northwestern Stove Repair Co., Chicago, Ill.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Pittsburgh Furnace Parts Co., Pittsburgh, Pa.

PASTE, ASBESTOS PAPER

Acme Asbestos Covering & Flooring Co., Chicago, Ill.
 Keasbey & Mattison Co., Ambler, Pa.
 Norristown Magnesia & Asbestos Co., Norristown, Pa.
 Rutland Fire Clay Co., Rutland, Vt.
 Sall Mountain Co., Hamilton, Ohio.
 Standard Asbestos Mfg. Co., Chicago, Ill.
 Wilson, Inc., Grant, Chicago, Ill.

PATTERNS AND BLUE PRINTS

Elbows, Skylights, Fittings, Etc.

Gray, G. L., New Haven, Conn.

PERFORATED METAL

See Metals, Perforated, Sheet and Plate

PERIMETER REGISTERS

See Diffusers, Air

PILLOW BLOCKS

See Bearings, Pillow Block

PILOT LIGHTS

See Controls, Pilots, Gas Burner

PIPE ANCHORS

See Anchors, Duct and Pipe

PIPE AND FITTINGS, CONDUCTOR

Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
 Alabama Metal Lath Co., Birmingham, Ala. (Steel & copper)
 American Metal Products, Los Angeles, Calif. (Alum.)
 Barnes Metal Products Co., Chicago, Ill. (Zinc, aluminum, galvanized and copper)
 Berger Bros. Co., Philadelphia, Pa.
 Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio. (Galvanized, stainless, copper)
 Braden Mfg. Co., Inc., Terre Haute, Ind.
 Carlon Products, Cleveland, Ohio. (Plastic)
 Char-Gale Mfg. Co., Anoka, Minn.
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
 Dieckmann Co., Ferdinand, Cincinnati, O. (Aluminum, copper)
 Downs-Smith Brass & Copper Co., New York, N. Y. (Copper)
 Enderle, Inc., Ltd., Frank X., Los Angeles, Calif.
 Franck & Fric, Cleveland, O.
 Galvan Mfg. Co., New Albany, Ind.
 Globe Iron Roofing & Corrugating Co. Newport, Ky.
 Gray Metal Products, Inc., Rochester, N. Y.
 Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
 Inland Steel Products Co., Milwaukee, Wis. (Copper & galv.)
 Johns-Manville, New York, N. Y.
 Klauer Mfg. Co., Dubuque, Iowa.
 La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis. (Galv. steel)
 Lewow, David, New York, N. Y.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif. (Galv.)
 Matthiessen & Hegeler Zinc Co., La Salle, Ill. (Zinc)
 Miller & Doing, Brooklyn, N. Y.
 Moncrief Lenoir Mfg. Co., Houston, Tex. (Steel, aluminum, copper)

New Delphos Mfg. Co., Delphos, Ohio. (Galv. steel)
 Newport Steel Corp., Newport, Ky. (Galvanized steel)
 Northwest Metal Products, Inc., Seattle, Wash. (Galv. & copper)
 Obdyke, Inc., B. P., Philadelphia, Pa. (Copper, galv. & stainless steel)
 Overly Mfg. Co., Greensburg, Pa.
 Penn Supply & Metal Corp., Philadelphia, Pa. (Alum., copper, galv.)
 Reeves Steel & Mfg. Co., Dover, Ohio. (Galv. steel)
 Republic Steel Corp., Cleveland, O. (Steel)
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Riggins Metal Products, Inc., Kankakee, Ill.
 Rival Strap Corp., New York, N. Y.
 Roofing & Supply Co., Chattanooga, Tenn. (Steel, copper)
 Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
 Schecter Bros. Co., Philadelphia, Pa. (Galv. steel & copper)
 Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y. (Aluminum, copper, galvanized steel & zinc)
 Sioux Steel Co., Sioux Falls, S. Dak.
 Southern Iron Co., E. E., St. Louis, Mo. (Galv.)
 Standard Furnace Supply Co., Ltd., Omaha, Nebr. (Galvanized)
 Thor Metal Products Co., Inc., Syracuse, N. Y. (Galv. & copper)
 Tiffin Art Metal Co., Tiffin, Ohio. (Galv., copper, stainless steel, aluminum)
 Wallace Co., William, Meltalbestos Div., Belmont, Calif. (Galvanized and copper)
 Wheeling Corrugating Co., Wheeling, W. Va. (Galv. steel)
 Youngstown Sheet & Tube Co., Youngstown, O. (Steel)

PIPE AND FITTINGS, FURNACE

Pipe, Elbows, Tees, Collars, Cleanout Caps, Draw Bands, Reducers, Etc.

Acer & Whedon, Inc., Medina, N. Y.
 Acme Furnace Fitting Co., Chicago, Ill.
 Acme Mfg. Co., Philadelphia, Pa.
 Adelta Mfg. Co., Inc., Philadelphia, Pa. (Galv. & black)
 Aireflo Furnace Pipe Co., Brighton, Mich.
 Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
 American Metal Products, Los Angeles, Calif.
 Armstrong Fittings Co., Des Moines, Ia.
 Berger Furnace Corp., Belle Vernon, Pa.
 Bieler & Son, L., Long Island City, N. Y.
 Braden Mfg. Co., Inc., Terre Haute, Ind.
 Buckeye Furnace Pipe Co., Columbus, Ohio.
 Champion Furnace Pipe Co., Peoria, Ill.
 Char-Gale Mfg. Co., Anoka, Minn.
 Cincinnati Stamping & Furnace Co., Cincinnati, Ohio.
 Clayton & Lambert Mfg. Co., Louisville, Ky.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Corbman Bros., Inc., Philadelphia, Pa.
 Detroit Safety Furnace Pipe Co., Detroit, Mich.
 Enderle, Inc., Ltd., Frank X., Los Angeles, Calif.
 Excelsior Steel Furnace Co., Chicago, Ill.
 Famous Furnace Co., Cleveland, O.
 Felter Co., John, Modern Metals Div., Houston, Tex.
 Gary Steel Products Corp., Gary, Ind.
 Gerhardt Co., Inc., George T., Sausalito, Calif.
 Grand Island Furnace & Supply Co., Grand Island, Nebr.
 Gray Metal Products, Inc., Rochester, N. Y.
 Green Colonial Furnace Co., Des Moines, Iowa.
 Henry Furnace Co., Medina, Ohio.
 Home Furnace Co., Holland, Mich.
 Hugert Mfg. Co., Medina, Ohio.
 Inland Steel Products Co., Milwaukee, Wis.
 International Heater Co., Utica, N. Y.
 J & J Sheet Metal Co., Van Dyke, Mich.
 Jetronaire, Inc., Pittsburgh, Pa.
 Juniper Elbow Co., Inc., Middle Village, L.I., N.Y.
 Keith Furnace Co., Des Moines, Iowa.
 La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis.
 Lennox Industries, Inc., Marshalltown, Iowa.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif. (Galv.)
 Lyman Co., H. B., Southampton, Hampshire Co., Mass.
 Made-Rite Co., Inc., Newport, Ky.
 Maple City Furnace Co., Monmouth, Ill.
 Metal Fabricators, Inc., Charlotte, N. C.
 Metalmen, Inc., Chicago, Ill.
 Meyer & Bro. Co., F., Peoria, Ill.
 Mirror Patented Stove Pipe Co., Hartford, Conn.
 Moncrief Furnace Co., Atlanta, Ga.
 Montag Inc., Portland, Ore.
 Mueller Climatrol, Milwaukee, Wis.
 Northwest Metal Products, Inc., Seattle, Wash. (Black & galv.)

Ohio Valley Hardware Co., Inc., Evansville, Ind.
 Paramount Supply Co., Lincoln, Nebr. (Galvanized and aluminum)
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Penn Supply & Metal Corp., Philadelphia, Pa.
 Perfection Furnace Pipe Co., Toledo, Ohio.
 Premier Furnace Co., Dowagiac, Mich.
 Quality Heating Supply Co., Cincinnati, O.
 Quass & Sons, Chas. E., Canton, O.
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Reeves Steel & Mfg. Co., Dover, Ohio.
 Riggins Metal Products, Kankakee, Ill.
 Roofing & Supply Co., Chattanooga, Tenn.
 Round Oak Co., Inc., Dowagiac, Mich.
 St. Clair Metal Products Co., Cleveland, Ohio.
 Schecter Bros. Co., Philadelphia, Pa.
 Sheet Metal Mfg. Co., Youngstown, O.
 Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y.
 Sheet Metal Specialty Div., Follansbee Steel Corp., Follansbee, W. Va.
 Sioux Steel Co., Sioux Falls, S. D.
 Snappy Inc., Detroit Lakes, Minn.
 Southbridge Roofing Co., Inc., Southbridge, Mass.
 Souther Iron Co., E. E., St. Louis, Mo.
 Standard Furnace Supply Co., Ltd., Omaha, Nebr.
 Stratton & Terstege Co., Louisville, Ky.
 Superior Metal Fabricating Co., Niles, O.
 Superior Products Co., Omaha, Nebr.
 Thor Metal Products, Inc., Syracuse, N. Y.
 Tierney Rotor Ventilator Co., Minneapolis, Minn.
 Tiffin Art Metal Co., Tiffin, O.
 Tri-State Heating Supply, Inc., Ft. Wayne, Ind.
 United States Register Co., Battle Creek, Mich.
 Viking Mfg. Corp., Cleveland, O.
 Waverly Heating Supply Co., Boston, Mass.
 Wheeling Corrugating Co., Wheeling, W. Va.
 Wheelock Co., Geo. F., The, Birmingham, Ala.
 Wilder Products Co., Springfield, Ohio.
 Williamson Co., The, Cincinnati, Ohio.
 Youngstown Furnace Co., Youngstown, Ohio.

PIPE LOCK FORMERS

See Machines, Lock Forming

PITTSBURGH LOCK FORMING MACHINES

See Machines, Pittsburgh Lock Forming

PLASTIC SHEETS

See Sheets, Non-Metallic

PLASTIC TRANSLUCENT PANELS

See Panels, Plastic, Translucent Material

PLASTIC TUBING

See Tubing, Plastic

PLATES, ALLOY

Allegheny Ludlum Steel Corp., Pittsburgh, Pa. (Stainless steel)
 Aluminum Co. of America, Pittsburgh, Pa.
 American Brass Co., Waterbury, Conn. (Copper)
 Armco Steel Corp., Middletown, Ohio. (Stainless steel)
 Belmont Smelting & Refining Wks., Inc., Brooklyn, N. Y. (Zinc, lead)
 Bethlehem Steel Co., Bethlehem, Pa.
 Bridgeport Brass Co., Bridgeport, Conn.
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper and its alloys)
 Crucible Steel Co. of America, Pittsburgh, Pa. (Stainless and high alloy)
 Division Lead Co., Summit, Ill. (Lead, tin, zinc)
 Dow Chemical Co., Midland, Mich. (Magnesium)
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Brass)
 Eastern Stainless Steel Corp., Baltimore, Md. (Stainless steel)
 Inland Steel Co., Chicago, Ill.
 International Nickel Co., Inc., New York, N. Y. (Nickel & nickel alloys)
 Jessop Steel Co., Washington, Pa. (Carbon, high speed)
 Kaiser Aluminum & Chemical Corp., Oakland, Calif. (Aluminum)
 Lukens Steel Co., Coatesville, Pa. (Nickel, chromium, copper, manganese, molybdenum, alloys)
 Republic Steel Corp., Cleveland, O.
 Revere Copper & Brass Inc., New York, N. Y. (Copper & copper base)
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Sharon Steel Corp., Sharon, Pa. (Stainless)

United States Steel Corp., Pittsburgh, Pa.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y. (Stainless)
Youngstown Sheet & Tube Co., Youngstown, Ohio.

PLATES, STEEL

Armco Steel Corp., Middletown, Ohio.
Bethlehem Steel Co., Bethlehem, Pa.
Crucible Steel Co. of America, Pittsburgh, Pa.
Granite City Steel Co., Granite City, Ill.
Inland Steel Co., Chicago, Ill.
International Steel Co., Evansville, Ind.
Jessop Steel Co., Washington, Pa.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Lukens Steel Co., Coatesville, Pa.
Republic Steel Corp., Cleveland, O.
Rolled Steel Products Div., Emergency Steel Service Corp., Skokie, Ill.
Sharon Steel Corp., Sharon, Pa.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.
Wood Steel Co., Alan, Conshohocken, Pa.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

PLATES, WROUGHT IRON

Byers Co., A. M., Pittsburgh, Pa.

POLISHERS

See Buffers, Grinders, Polishers and Sanders

POWER GROOVERS

See Machines, Sheet Metal Working, Grooving

POWER SHEARS

See Machines, Sheet Metal, Shears

PRECIPITATORS, ELECTROSTATIC

See Cleaners, Air Electrical

PREFABRICATED DUCTS

See Ducts, Prefabricated

PRESSES

See Machines, Sheet Metal, Presses

PROPELLER FANS

See Fans, Propeller Type

PROTECTIVE COATING

See Waterproofing, Coating Materials

PROTECTORS, WINDOW AIR CONDITIONER

Tulsa Canvas Products Co., Inc., Tulsa, Okla.

PSYCHROMETERS, SLING AND HAND ASPIRATED

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Foxboro Co., Foxboro, Mass.
Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
G. M. Mfg. Co., New York, N. Y.
General Scientific Equipment Co., Philadelphia, Pa.
H-B Instrument Co., Philadelphia, Pa.
Hill & Co., E. Vernon, Lake Geneva, Wis.
Johnson Service Co., Milwaukee, Wis.
Moeller Instrument Co., Richmond Hill, N. Y.
Palmer Thermometers, Inc., Norwood, Cincinnati, Ohio.
Philadelphia Thermometer Co., Philadelphia, Pa.
Precision Thermometer & Instrument Co., Philadelphia, Pa.
Taylor Instrument Companies, Rochester, N. Y.
Weisker Thermometer Corp., Freeport, N. Y.
Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.

PULLEYS, FAN AND MOTOR

American Pulley Co., Philadelphia, Pa.
Browning Mfg. Co., Inc., Maysville, Ky.
Chicago Die Casting, Mfg. Co., Chicago, Ill.
Congress Drives, Div. Tann Corp., Detroit, Mich.
Dayton Rubber Co., Dayton, Ohio.
DoAll Co., Des Plaines, Ill.
Dodge Mfg. Corp., Mishawaka, Ind.
Equipment Engineering Co., Minneapolis, Minn. (Variable pitch)
Gates Rubber Co., Denver, Colo.
Goldens' Foundry & Machine Co., Columbus, Ga.

Jones Machinery Div., Hewitt-Robins Inc., Chicago, Ill.
Lau Blower Co., Dayton, Ohio.
Lovejoy Flexible Coupling Co., Chicago, Ill.
Maurey Mfg. Corp., Chicago, Ill.
Mitchell Co., Inc., John E., Dallas, Texas.
Pyott Foundry & Machinery Co., Chicago, Ill.
Replacement Parts, Inc., Euclid, O.
Spun Steel Div., Automatic Steel Products, Inc., Canton, Ohio.
United States Register Co., Battle Creek, Mich.
Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
Wood's Sons Co., T. B., Chambersburg, Pa.
Zatko Metal Products Co., Euclid, O.

PULLEYS, FURNACE CHAIN

Hart & Cooley Mfg. Co., Holland, Mich.
United States Register Co., Battle Creek, Mich.

PUMP COMPOUNDS

See Compounds, Winter Protective, Pump

PUMPS, FUEL, OIL BURNER

A-P Controls Corp., Milwaukee, Wis.
Barclay, Inc., Robt., Chicago, Ill.
Kraissl Co., Inc., Hackensack, N. J.
Roper Corp., Geo. D., Rockford, Ill.
Sundstrand Hydraulic Div., Rockford, Ill.
Tuthill Pump Co., Chicago, Ill.
Union Steam Pump Co., Battle Creek, Mich.
Viking Pump Co., Cedar Falls, Iowa.

PUMPS, RECIRCULATING, EVAPORATIVE COOLER

Beckett & Co., Thomas, Dallas, Texas.
Buffalo Forge Co., Buffalo, N. Y.
Burnrite Valve Mfg. Corp., Mt. Vernon, N. Y.
Fairbanks, Morse & Co., Chicago, Ill.
G & S Mfg. Co., Phoenix, Ariz.
International Metal Products Co., Phoenix, Ariz.
Jabco Pump Co., Burbank, Calif.
Kraissl Co., Inc., Hackensack, N. J.
Little Giant Vaporizer Co., Oklahoma City, Okla.
Midwest Mfg. Co., Lawrence, Kans.
Morey, Dan, Los Angeles, Calif.
National Engineering & Mfg. Co., Sedalia, Mo.
Palmer Mfg. Corp., Phoenix, Ariz.
Robbins & Myers, Inc., Springfield, Ohio.
Ruthman Machinery Co., Cincinnati, O.
Tech-Tron Corp., Lawrence, Kans.
Union Steam Pump Co., Battle Creek, Mich.
Universal Mfg. Co., Phoenix, Ariz.
Wright Mfg. Co., Phoenix, Ariz.
Yeomans Bros. Co., Melrose Park, Ill.

PUNCHES AND SHEARS COMBINED, LEVER OPERATED

Berkroy Products Co., Burbank, Calif.
Buffalo Forge Co., Buffalo, N. Y.
Cleveland Punch & Shear Works Co., Cleveland, Ohio.
Excelsior Tool & Machine Co., East St. Louis, Ill.
Heartley Machine & Tool Co., Toledo, Ohio.
Heinrich Tools, Inc., Racine, Wis.
Hendley & Whittemore Co., Beloit, Wis.
Kidder Mfg. Co., Inc., J. F., Burlington, Vt.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Rotex Punch Co., Inc., San Leandro, Calif.
Thor Tool & Die Co., San Leandro, Calif.

PUNCHES, BENCH

Berkroy Products Co., Burbank, Calif.
Buffalo Forge Co., Buffalo, N. Y.
Champion Blower & Forge Co., Lancaster, Pa.
Chase Mfg. Co., Los Angeles, Calif.
Diamond Machine Tool Co., Pico, Calif.
Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
Heartley Machine & Tool Co., Toledo, Ohio.
Heinrich Tools, Inc., Racine, Wis.
Hendley & Whittemore Co., Beloit, Wis.
Kidder Mfg. Co., J. F., Burlington, Vt.
Merchandising & Mfg. Associates, Inc., Lancaster, Pa.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., Southington, Conn.
Rotex Punch Co., Inc., San Leandro, Calif.
Thor Tool & Die Co., San Leandro, Calif.
Whitney Mfg. Co., W. A., Rockford, Ill.
Whitney Metal Tool Co., Rockford, Ill.

PUNCHES, COMBINATION HAND AND BENCH

Champion Blower & Forge Co., Lancaster, Pa.
Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
Heartley Machine & Tool Co., Toledo, Ohio.
Hendley & Whittemore Co., Beloit, Wis.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., Southington, Conn.
Rotex Punch Co., Inc., San Leandro, Calif.
Thor Tool & Die Co., San Leandro, Calif.
Whitney Mfg. Co., W. A., Rockford, Ill.
Whitney Metal Tool Co., Rockford, Ill.

PUNCHES, HAND

Allen, H. D., Los Angeles, Calif.
Berkroy Products Co., Burbank, Calif.
Buffalo Forge Co., Buffalo, N. Y.
Champion Blower & Forge Co., Lancaster, Pa.
Cleveland Punch & Shear Works Co., Cleveland, Ohio.
Crescent Tool Co., Jamestown, N. Y.
Damascus Steel Products Corp., Rockford, Ill.
Davis & Son Machine Works, Los Angeles, Calif.
Diamond Machine Tool Co., Pico, Calif.
Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
Excelsior Tool & Machine Co., East St. Louis, Ill.
Hendley & Whittemore Co., Beloit, Wis.
Ingels Elbow Machine Corp., Chicago, Ill.
Johnson, Inc., William, Newark, N. J.
Kidder Mfg. Co., J. F., Burlington, Vt.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Penn Tool Co., Philadelphia, Pa.
Reiner & Campbell Co., Inc., Newark, N. J.
Rotex Punch Co., Inc., San Leandro, Calif.
Snap-on Tools Corp., Kenosha, Wis.
Stanley Electric Tools Div., The Stanley Works, New Britain, Conn.
Thor Tool & Die Co., San Leandro, Calif.
Whitney Mfg. Co., W. A., Rockford, Ill.
Whitney Metal Tool Co., Rockford, Ill.

PUNCHES, POWER

See Machines, Sheet Metal Working, Punches

QUADRANTS, DAMPER

See Regulators, Duct Damper Sets; Hardware, Duct Fitting

RAIN CARRYING EQUIPMENT

See Gutters; Gutter Accessories; Pipes and Fittings, Conductor

REBUILT SHEET METAL WORKING MACHINES

See Machinery, Sheet Metal, Rebuilt and Used

RECORDERS, HUMIDITY, PORTABLE

Bristol Co., Waterbury, Conn.
Foxboro Co., Foxboro, Mass.
Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
Leeds & Northrup Co., Philadelphia, Pa.
Manning, Maxwell & Moore, Inc., Stratford, Conn.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Moeller Instrument Co., Richmond Hill, N. Y.
Taylor Instrument Companies, Rochester, N. Y.
United States Gauge Div., American Machine & Metals, Inc., Sellersville, Pa.
Weksler Thermometer Corp., Freeport, N. Y.
Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.

RECORDERS, TEMPERATURE, PORTABLE

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Bailey Meter Co., Cleveland, Ohio.
Bristol Co., Waterbury, Conn.
Defender Instrument & Regulator Co., St. Louis, Mo.
Dickson Co., Chicago, Ill.
Foxboro Co., Foxboro, Mass.
Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
Heat-Timer Corp., New York, N. Y.
Leeds & Northrup Co., Philadelphia, Pa.
Manning, Maxwell & Moore, Inc., Stratford, Conn.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Moeller Instrument Co., Richmond Hill, N. Y.
Palmer Thermometers, Inc., Cincinnati, Ohio.
Preferred Utilities Mfg. Corp., New York, N. Y.
Taylor Instrument Companies, Rochester, N. Y.

United States Gauge Div., American Machine & Metals, Inc., Sellersville, Pa.
Weksler Thermometer Corp., Freeport, N. Y.
Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.

RECOVERERS, HEAT

Air Conditioning Engineering Co., Cambridge, Mass.
Autogas Co., Bellwood, Ill.
Cary Mfg. Co., Waupaca, Wis.
Gerhardt, W. F., Richmond, Va.
Hoskinson Free Heater Inc., Bellerose, L. I., N. Y.
Lepick Heater Co., Seattle, Wash.
Micro Scotch Heater Corp., Subsidiary of Micro-Moisture Controls, Inc., Mineola, N. Y.
Norse Boiler Co., New Market, N. J.
Therm Oil Burner Co., Seattle, Wash.
Therm-O-Wheel, Inc., Far Rockaway, N. Y.

REELS, SHEET METAL WINDING

Dahlstrom Machine Works, Chicago, Ill.

REFRACTORIES

Amerform Corp., Philadelphia, Pa.
Armstrong Cork Co., Lancaster, Pa. (Insulating)
Babcock & Wilcox Co., Refractories Div., New York, N. Y.
Botfield Refractories Co., Philadelphia, Pa.
Fireline Stove & Furnace Lining Co., Chicago, Ill. (For hearths and firepot linings)
Green Fire Brick Co., A. P., Mexico, Mo. (All types fire clay)
Insulating Castable Corp., River Rouge, Mich.
Iron-Hide Sales Co., Matawan, N. J.
Johns-Manville, New York, N. Y.
Kolb Refractories Co., Philadelphia, Pa.
Monogram Products Co., Inc., Philadelphia, Pa.
Pyrolite Products Co., Cleveland, Ohio.
Quigley Co., Inc., New York, N. Y.
Ramtite Co., Div. S. Obermayer Co., Chicago, Ill.
Rehm, R., St. Albans, N. Y. (Radiant)
Refractory & Insulation Corp., New York, N. Y.
Rex Roto Corp., Detroit, Mich.
Robinson Insulation Co., Great Falls, Mont. (Vermiculite)
Rutland Fire Clay Co., Rutland, Vt. (Retort Cement)
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Saureisen Cements Co., Pittsburgh, Pa.
Standard Fuel Engineering Co., Detroit, Mich.
United States Stoneware Co., New York, N. Y.

REFRIGERANTS

Ansul Chemical Co., Refrigeration Div., Marinette, Wis. (Methyl chloride, sulphur dioxide)
Dow Chemical Co., The, Midland, Mich.
du Pont de Nemours & Co., Inc., E. I. Kinetic Chemicals Div., Wilmington, Del. ("Freon" fluorinated hydro carbon refrigerants)
Eston Chemicals Div., American Potash & Chemicals Corp., Los Angeles, Calif.
General Chemical Div., Allied Chemical & Dye Corp., New York, N. Y.
Solvay Sales Div., Allied Chemical & Dye Corp., New York, N. Y.

REFRIGERATING UNITS

See Condensing Units, Refrigerating

REGISTER SEALS

See Seals for Registers

REGISTERS, HEATING, VENTILATING AND AIR CONDITIONING

A & A Register Co., Cleveland, Ohio.
A-J Mfg. Co., Kansas City, Mo.
Adelta Mfg. Co., Philadelphia, Pa.
Air Control Products, Inc., Coopersville, Mich.
Air Distribution Products Co., Los Angeles, Calif.
Air-Factors, Inc., Monrovia, Calif.
American Warming & Ventilating Co., Toledo, Ohio.
Auer Register Co., Cleveland, Ohio.
Barber-Colman Co., Rockford, Ill.
Berger Furnace Corp., Belle Vernon, Pa.
Brandes Co., Madison, Wis.
Carnes Co., W. R., Verona, Wis.
Char-Gale Mfg. Co., Anoka, Minn.
Cleveland Register & Grille Mfg. Co., Cleveland, O.

Controlair Mfg. Co., Los Angeles, Calif.
 Corbman Bros., Inc., Philadelphia, Pa.
 Detroit Float Co., Air Conditioning Products Div., Detroit, Mich.
 Diamond Mfg. Co., Wyoming, Pa.
 Empire Ventilation Equipment Co., Long Island City, N. Y.
 Flangeklamp Corp., Buffalo, N. Y.
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 General Register Corp., Cedar Grove, N. J.
 Gerwin Industries, Thermo-Base Div., Michigan City, Ind.
 Harrington & King Perforating Co., Chicago, Ill.
 Harrison Sheet Steel Co., Chicago, Ill.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Hendrick Mfg. Co., Carbondale, Pa.
 Independent Register Co., Cleveland, Ohio.
 Kalamazoo Furnace & Appliance Mfg. Co., Kalamazoo, Mich.
 Krueger Air Conditioning Co., Tucson, Ariz.
 Lima Register Co., Lima, Ohio.
 Louvra Corp., Union, N.J.
 Midco Register Corp., St. Paul, Minn.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Mueller Climatrol, Milwaukee, Wis.
 National Grille & Register Co., Cleveland, O.
 Patco Mfg. Co., Philadelphia, Pa.
 Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
 Rock Island Register Co., Rock Island, Ill.
 Simmons Heating Supply Co., Primos, Pa.
 Smith Co., J. B., Philadelphia, Pa.
 Standard Stamping & Perforating Co., Chicago, Ill.
 Stewart Mfg. Co., Cedar Grove, N. J.
 Titus Mfg. Corp., Waterloo, Iowa.
 Tuttle & Bailey, Inc., New Britain, Conn.
 United States Register Co., Battle Creek, Mich.
 Vectaire Mfg. Co., Melrose, Mass.
 Viking Mfg. Corp., Cleveland, O.
 Waterloo Register Co., Inc., Waterloo, Ia.
 Wilde Register & Grille Co., Detroit, Mich.
 Young Regulator Co., Cleveland, Ohio.

REGULATORS, DUCT DAMPER SETS

Acme Mfg. Co., Philadelphia, Pa.
 Adams Co., Dubuque, Iowa.
 Adelta Mfg. Co., Philadelphia, Pa.
 Air Control Products, Inc., Coopersville, Mich.
 Barber-Colman Co., Rockford, Ill.
 Cole-Sewell Engineering Co., St. Paul, Minn.
 Connecticut State Furnace Co., Bridgeport, Conn.
 Controlair Mfg. Co., Los Angeles, Calif.
 Corbman Bros., Inc., Philadelphia, Pa.
 Duro-Dyne Corp., New Hyde Park, L.I., N. Y.
 Elgen Mfg. Corp., Long Island City, N. Y.
 Gerrett Corp., M. A., Milwaukee, Wis.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Malm Mfg. Co., St. Paul, Minn.
 Martens & Stormoen, West Quincy, Mass.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Perfex Corp., Milwaukee, Wis.
 Severson Mfg. & Supply Co., Milwaukee, Wis.
 Thermal Agency, Houston, Tex.
 United States Register Co., Battle Creek, Mich.
 Young Regulator Co., Cleveland, Ohio.

REGULATORS, FURNACE DRAFT, MECHANICAL

Atlas Valve Co., Newark, N. J.
 Defender Instrument & Regulator Co., St. Louis, Mo.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Hays Corp., Michigan City, Ind.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 National Fuel Conservation Co., Inc., White Plains, N. Y.
 Preferred Utilities Mfg. Corp., New York, N. Y.
 Quickdraft Co., Canton, O.

RELAYS, ELECTRICAL

See Controls, Relay

REMOVER, SOOT

Ampion Corp., Long Island City, N. Y.
 Coughlan Co., G. N., West Orange, N. J.
 General Filters, Inc., Novi, Mich.
 Harvey, Inc., Sid, Valley Stream, N. Y.
 Hercules Chemical Co., Inc., New York, N. Y.
 Madden Corp., The, Chicago, Ill.
 Magnus Chemical Co., Garwood, N. J.
 Marine Electrolysis Eliminator Co., Seattle, Wash.
 Metropolitan Refining Co., Inc., Long Island City, N. Y.
 Miller Products Co., Lansing, Mich.

Norman Chemical Co., St. Paul, Minn.
 North American Mogul Products Co., Cleveland, Ohio.
 Red Wing Oil Burner Co., Inc., Medford, Mass.
 Saginaw Salt Products Co., Saginaw, Mich.
 S.O.S. Products Co., Inc., Brooklyn, N. Y.
 Tamms Industries Inc., Chicago, Ill.

RETURN AIR FACES AND INTAKES

See Faces, Return Air

RIDGE ROLL, SHEET METAL

Alabama Metal Lath Co., Birmingham, Ala. (Steel)
 American Steel Band Co., Pittsburgh, Pa.
 American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Appleton Supply Co., Inc., Appleton, Wis. (Galvanized steel)
 Barnes Metal Products Co., Chicago, Ill.
 Berger Bros. Co., Philadelphia, Pa.
 Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio. (Galv. stainless steel & copper)
 Bethlehem Steel Co., Bethlehem, Pa.
 Ceco Steel Products Corp., Chicago, Ill. (Galvanized)
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Copper)
 Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
 Inland Steel Products Co., Milwaukee, Wis. (Galv. & copper)
 Kaiser Aluminum & Chemical Corp., Oakland, Calif. (Aluminum)
 Klauer Mfg. Co., Dubuque, Iowa.
 La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis.
 Matthiessen & Hegeler Zinc Co., La Salle, Ill. (Zinc)
 New Delphos Mfg. Co., Delphos, Ohio. (Galv. steel)
 Newport Rolling Mill Co., Newport, Ky.
 Nichols Wire & Aluminum Co., Davenport, Iowa. (Aluminum)
 Northwest Metal Products, Inc., Seattle, Wash. (Galv. & copper)
 Plasteel Products Co., Washington, Pa.
 Quaker State Metals Co., Lancaster, Pa. (Aluminum)
 Reeves Steel & Mfg. Co., Dover, Ohio. (Galv. steel)
 Republic Steel Corp., Cleveland, O.
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y. (Copper, aluminum, galvanized, zinc)
 Sioux Steel Co., Sioux City, S. D. (Galv. & copper)
 Southbridge Roofing Co., Inc., Southbridge, Mass.
 Souther Iron Co., E. E., St. Louis, Mo. (Galv.)
 Southern States Iron Roofing Co., Savannah, Ga. (Galvanized steel)
 Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
 Tiffin Art Metal Co., Tiffin, Ohio. (Galv. copper, stainless steel, aluminum)
 Van Noorden Co., E., Boston, Mass.
 Wallace Co., William, Metalbestos Div., Belmont, Calif. (Galvanized)
 Wheeling Corrugating Co., Wheeling, W. Va. (Galv. steel)

RIDGE VENTILATORS

See Ventilators, Roof

RIVETS, ALLOY

Bethlehem Steel Co., Bethlehem, Pa.
 Clark Bros. Bolt Co., Milldale, Conn.
 du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
 General Plate Div., Metals & Controls Corp., Attleboro, Mass. (Silver)
 Harper Co., H. M., Morton Grove, Ill.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Huck Mfg. Co., Detroit, Mich. (Blind)
 Republic Steel Corp., Cleveland, Ohio.
 Townsend Co., New Brighton, Pa.
 Tubular Rivet & Stud Co., Wollaston (Quincy) Mass.

RIVETS, ALUMINUM

Aluminum Co., of America, Pittsburgh, Pa.
 Chicago Rivet & Machine Co., Bellwood, Ill.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
 du Pont de Nemours & Co., Inc. E. I., Wilmington, Del. (Explosive)
 Goodrich Co., B. F., Akron, Ohio. (Blind)
 Harper Co., H. M., Morton Grove, Ill.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Huck Mfg. Co., Detroit, Mich. (Blind)
 Reynolds Metals Co., Louisville, Ky.
 Southco Div., South Chester Corp., Lester, Pa. (Blind)
 Tubular Rivet & Stud Co., Wollaston (Quincy) Mass.

RIVETS, BRASS OR COPPER

Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Rivet & Machine Co., Bellwood, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
du Pont de Nemours & Co., Inc., E. I., Wilmington, Del. (Explosive)
Goodrich Co., B. F., Akron, Ohio. (Blind-Brass)
Harper Co., H. M., Morton Grove, Ill.
Hassall, Inc., John, Westbury, L. I., N. Y.
Huck Mfg. Co., Detroit, Mich. (Blind)
Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
Taunton & Co., Inc., John H., New York, N. Y.
Townsend Co., New Brighton, Pa.
Tubular Rivet & Stud Co., Wollaston (Quincy) Mass.

RIVETS, IRON

Chicago Rivet & Machine Co., Bellwood, Ill.
Hassall, Inc., John, Westbury, L. I., N. Y.
Huck Mfg. Co., Detroit, Mich.
Townsend Co., New Brighton, Pa.

RIVETS, STEEL

Bethlehem Steel Co., Bethlehem, Pa.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cherry Rivet Co., Los Angeles, Calif. (Blind)
Chicago Rivet & Machine Co., Bellwood, Ill.
Clark Bros. Bolt Co., Milldale, Conn.
Goodrich Co., B. F., Akron, Ohio.
Hassall, Inc., John, Westbury, L. I., N. Y.
Huck Mfg. Co., Detroit, Mich. (Blind)
Republic Steel Corp., Cleveland, Ohio.
Townsend Co., New Brighton, Pa.
Tubular Rivet & Stud Co., Wollaston (Quincy) Mass.

ROD CUTTERS

See Machines, Sheet Metal Working, Rod Cutting

ROD, WELDING

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brass Co., New York, N. Y.
American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
Arcos Corp., Philadelphia, Pa. (Stainless steel)
Bridgeport Brass Co., Bridgeport, Conn.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Crucible Steel Co., of America, Pittsburgh, Pa. (Stainless steel)
Dow Chemical Co., Midland, Mich. (Magnesium)
Eutectic Welding Alloys Corp., Flushing, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio.
International Nickel Co., Inc., New York, N. Y. (Nickel & nickel alloys)
Lincoln Electric Co., Cleveland, O.
Linde Air Products Co., New York, N. Y.
Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp., New York, N. Y.
Miracle Rod Co. of Illinois, Chicago, Ill.
Mueller Brass Co., Port Huron, Mich.
National Cylinder Gas Co., Chicago, Ill.
Page Steel & Wire Div., American Chain & Cable Co., Inc., Monessen, Pa.
Revere Copper & Brass Inc., New York, N. Y.
Sight Feed Generator Co., West Alexandria, Ohio.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Tennessee Fabricating Co., Memphis, Tenn.
United Wire & Supply Corp., Providence, R. I.
Victor Equipment Co., San Francisco, Calif.
Wall Colmonoy Corp., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

ROLL FORMERS

See Machines, Sheet Metal Working, Slit Roll Forming

ROOF CEMENT

See Cement, Roof

ROOF DECKING

See Decking, Roof, Metal

ROOF TRIM (MOULDINGS), STEEL, EAVES AND RAKES

Alabama Metal Lath Co., Birmingham, Ala.

Appleton Supply Co., Inc., Appleton, Wis.
Inland Steel Products Co., Milwaukee, Wis.
New Delphos Mfg. Co., Delphos, O.
Northwest Metal Products, Inc., Seattle, Wash.
Obdyke, Inc., B. P., Philadelphia, Pa.
Penn Supply & Metal Corp., Philadelphia, Pa.
Quaker State Metals Co., Lancaster, Pa.
Republic Steel Corp., Cleveland, O.
Reynolds Metals Co., Louisville, Ky.
Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y.
Sioux Steel Co., Sioux Falls, S. D.
Southern States Iron Roofing Co., Savannah, Ga.
Wheeling Corrugating Co., Wheeling, W. Va.

ROOF VENTILATORS

See Ventilators, Roof

ROOFING, BUILT-UP

See Felt, Roofing

ROOFING MACHINES

See Machines, Sheet Metal Working, Pan Forming

ROOFING, SHEET METAL, ALUMINUM

Aluminum Co., of America, Pittsburgh, Pa.
Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Nichols Wire & Aluminum Co., Davenport, Iowa.
Overly Mfg. Co., Greensburg, Pa.
Penn Supply & Metal Corp., Philadelphia, Pa.
Quaker State Metals Co., Lancaster, Pa.
Ralph Mfg. Co., Inc., Wadsworth, Ohio.
Revere Copper and Brass, Inc., New York, N. Y.
Reynolds Metals Co., Louisville, Ky.
Southern States Iron Roofing Co., Savannah, Ga.
Tiffin Art Metal Co., Tiffin, Ohio.

ROOFING, SHEET METAL, COPPER

American Brass Co., Waterbury, Conn.
Braden Mfg. Co., Inc., Terre Haute, Ind.
Bridgeport Brass Co., Bridgeport, Conn.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Hussey & Co., C. G., Pittsburgh, Pa.
Klauser Mfg. Co., Dubuque, Iowa.
Overly Mfg. Co., Greensburg, Pa.
Perkinson, William J., Chicago, Ill.
Revere Copper & Brass Inc., New York, N. Y.

ROOFING, SHEET METAL, LEAD

Alpha Metals, Inc., Jersey City, N. J.
Chase Brass & Copper Co., Inc., Waterbury, Conn. (Coated copper)
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Empire Metal Co., Syracuse, N. Y.
Federated Metals Div. American Smelting & Refining Co., New York, N. Y.
Flemm Lead Co., Inc., Long Island City, N. Y.
Illinois Zinc Co., Chicago, Ill.
Kirk & Son, Morris P., Los Angeles, Calif. (copper, galv iron)
National Lead Co., New York, N. Y.
Northwest Lead Co., Seattle, Wash.
Overly Mfg. Co., Greensburg, Pa.
Standard Rolling Mills Div. of Revere Copper and Brass Inc., Brooklyn, N. Y.

ROOFING, SHEET METAL, MONEL

International Nickel Co., Inc., New York, N. Y.
Overly Mfg. Co., Greensburg, Pa.

ROOFING, SHEET METAL, STEEL, GALVANIZED

Airtherm Mfg. Co., St. Louis, Mo.
Ajax Furnace Fitting Co., Div. Cincinnati Sheet Metal & Roofing Co., Cincinnati, Ohio.
American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Bethlehem Steel Co., Bethlehem, Pa.
Braden Mfg. Co., Inc., Terre Haute, Ind.
Ceco Steel Products Corp., Chicago, Ill.
Detroit Steel Products Co., Detroit, Mich.
Goldsmith Metal Lath Co., Cincinnati, Ohio.
Granite City Steel Co., Granite City, Ill.
Inland Steel Co., Chicago, Ill.
Inland Steel Products Co., Milwaukee, Wis.

International Steel Co., Evansville, Ind.
 Klauer Mfg. Co., Dubuque, Iowa.
 La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis.
 Lyon, Conklin & Co., Inc., Baltimore, Md.
 New Delphos Mfg. Co., Delphos, Ohio.
 Newport Steel Corp., Newport, Ky.
 Overly Mfg. Co., Greensburg, Pa.
 Penn Supply & Metal Corp., Philadelphia, Pa.
 Perkinson, William J., Chicago, Ill.
 Plasteel Products Corp., Washington, Pa.
 Reeves Steel & Mfg. Co., Dover, Ohio.
 Republic Steel Corp., Cleveland, Ohio.
 Roofing & Supply Co., Chattanooga, Tenn.
 Sioux Steel Co., Sioux Falls, S. D.
 Souther Iron Co., E. E., St. Louis, Mo.
 Southern States Iron Roofing Co., Savannah, Ga.
 Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
 Tiffin Art Metal Co., Tiffin, Ohio.
 Truscon Steel Div., Republic Steel Corp., Youngstown, O.
 United States Steel Corp., Pittsburgh, Pa.
 Wheeling Corrugating Co., Wheeling, W. Va.

ROOFING, SHEET METAL, STEEL, PROTECTIVE COATED

Airtherm Mfg. Co., St. Louis, Mo.
 American Steel Band Co., Pittsburgh, Pa.
 Plasteel Products Corp., Washington, Pa.
 Robertson Co., H. H., Pittsburgh, Pa.

ROOFING, SHEET METAL, STEEL, TERNE PLATE

Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
 Fingles Co., Baltimore, Md.
 Follansbee Steel Corp., Follansbee, W. Va.
 Inland Steel Products Co., Milwaukee, Wis.
 Klauer Mfg. Co., Dubuque, Iowa.
 Lyon, Conklin & Co., Inc., Baltimore, Md.
 New Delphos Mfg. Co., Delphos, Ohio.
 Roofing & Supply Co., Chattanooga, Tenn.
 Sioux Steel Co., Sioux Falls, S. D.
 United States Steel Corp., Pittsburgh, Pa.
 Wheeling Corrugating Co., Wheeling, W. Va.
 Wheeling Metal & Mfg. Co., Moundsville, W. Va.

ROOFING, SHEET METAL, STEEL, TIN PLATE

Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
 Inland Steel Products Co., Milwaukee, Wis.
 Klauer Mfg. Co., Dubuque, Iowa.
 Lyon, Conklin & Co., Inc., Baltimore, Md.
 Perkinson, William J., Chicago, Ill.
 Sioux Steel Co., Sioux Falls, S. D.
 United States Steel Corp., Pittsburgh, Pa.
 Wheeling Corrugating Co., Wheeling, W. Va.

ROOFING, SHEET METAL, ZINC

Barnes Metal Products Co., Chicago, Ill.
 Empire Metal Co., Syracuse, N. Y.
 Illinois Zinc Co., Chicago, Ill.
 Matthiessen & Hegeler Zinc Co., La Salle, Ill.
 New Jersey Zinc Co., New York, N. Y.
 Perkinson, William J., Chicago, Ill.

ROOM COOLING UNITS

See Units, Air Conditioning, Room Type

ROOM THERMOSTATS

See Controls, Thermostats

ROUND DUCT, PREFABRICATED

See Pipe and Fittings, Furnace

ROUND DUCT SYSTEM, PACKAGED

See Systems, Heating, Small Pipe

RUST PROTECTION FOR METALS

See Chemicals, Rust Preventive

SANDERS

See Buffers, Grinders, Polishers and Sanders

SAVERS, HEAT

See Recoverers, Heat

SAWS, BAND, SHEET METAL CUTTING

See Machines, Sheet Metal Working, Saws, Band

SAWS, CIRCULAR

See Machines, Sheet Metal Working, Saws, Circular

SCREENS, SUN REFLECTING

Kaiser Aluminum & Chemical Corp., Oakland, Calif.
 Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.

SCREWS, SHEET METAL

Allmetal Screw Products Co., Inc., Garden City, N. Y.
 American Screw Co., Willimantic, Conn.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Clark Bros. Bolt Co., Milldale, Conn.
 Continental Screw Co., New Bedford, Mass.
 Elco Tool & Screw Corp., Rockford, Ill.
 Harper Co., H. M., Morton Grove, Ill.
 Independent Nail & Packing Co., Bridgewater, Mass.
 Industrial Screw Co., Chicago, Ill.
 National Lock Co., Inc., Rockford, Ill.
 Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.
 Pheoll Mfg. Co., Chicago, Ill.
 Rockford Screw Products Co., Rockford, Ill.
 Roofing & Supply Co., Chattanooga, Tenn.
 Russell, Birdsall & Ward Bolt & Nut Co., Port Chester, N. Y.
 Set Screw & Mfg. Co., Bartlett, Ill.
 Shakeproof Div., Illinois Tool Wks., Chicago, Ill.
 Star Stainless Screw Co., Paterson, N. J.
 Townsend Co., New Brighton, Pa.
 United States Register Co., Battle Creek, Mich.

SEALS FOR REGISTERS

Goodrich Co., B. F., Sponge Products Div., Shelton, Conn.

SEAMER MACHINES

See Machines, Sheet Metal Working, Seaming; Machines, Sheet Metal Working, Grooving

SETTING DOWN MACHINES

See Machines, Setting Down

SHEARS AND PUNCHES COMBINED

See Punches and Shears Combined

SHEARS, CIRCLE

See Machines, Sheet Metal Working, Shears, Circle

SHEARS, ELECTRIC

See Machines, Sheet Metal Working, Shears, Electric

SHEARS, HAND AND BENCH

See Snips and Shears, Bench and Hand

SHEARS, ROTARY

See Machines, Sheet Metal Working, Shears, Rotary, Slitting

SHEARS, SQUARING

See Machines, Sheet Metal Working, Shears, Squaring

SHEARS, THROATLESS

Beverly Shear Mfg. Co., The, Chicago, Ill.

SHEET METAL PANELS FOR CURTAIN WALL

See Panels, Curtain Wall

SHEETS, METAL, ALUMINUM

Aluminum Co. of America, Pittsburgh, Pa.
 American Nickeloid Co., Peru, Ill.
 American Silver Co., Inc., Flushing, N. Y.
 Apollo Metal Works, Chicago, Ill.
 Char-Gale Mfg. Co., Anoka, Minn.
 Fairmont Aluminum Co., Fairmont, W. Va.
 Kaiser Aluminum & Chemical Corp., Oakland, Calif.
 Lustrik, Inc., Philadelphia, Pa.
 Mueller Brass Co., Port Huron, Mich.
 Nichols Wire & Aluminum Co., Davenport, Iowa.
 Quaker State Metals Co., Lancaster, Pa.
 Ralph Mfg. Co., Wadsworth, Ohio.
 Revere Copper & Brass, Inc., New York, N. Y.
 Reynolds Metals Co., Louisville, Ky.
 Rigidized Metals Corp., Buffalo, N. Y.

SHEETS, METAL, CLAD

Allegheny Ludlum Steel Corp., Pittsburgh, Pa. (Stainless steel)
Aluminum Co. of America, Pittsburgh, Pa. (Aluminum)
American Nickeloid Co., Peru, Ill. (Nickel, chromium, brass & copper)
American Silver Co., Inc., Flushing, N. Y.
Division Lead Co., Summit, Ill. (Lead)
General Plate, Div. Metals & Controls Corp., Attleboro, Mass.
Handy & Harman, New York, N. Y.
Kaiser Aluminum & Chemical Corp., Oakland, Calif. (Aluminum)
Lukens Steel Co., Coatesville, Pa. (Nickel, Monel, Inconel & stainless steel)
Rigidized Metals Corp., Buffalo, N. Y.

SHEETS, METAL, COPPER

American Brass Co., Waterbury, Conn.
American Nickeloid Co., Peru, Ill.
American Silver Co., Inc., Flushing, N. Y.
Apollo Metal Works, Chicago, Ill.
Bridgeport Brass Co., Bridgeport, Conn.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Cheney Flashing Co., Trenton, N. J.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Hussey & Co., C. G., Pittsburgh, Pa.
Inland Steel Products Co., Milwaukee, Wis.
Klauer Mfg. Co., Dubuque, Ia.
Metals Div., Olin Mathieson Chemical Corp., East Alton, Ill.
Revere Copper & Brass Inc., New York, N. Y.
Rigidized Metals Corp., Buffalo, N. Y.
Roofing & Supply Co., Chattanooga, Tenn.
Weirton Steel Co., Weirton, W. Va.

SHEETS, METAL, COPPER, LEAD COATED

American Brass Co., Waterbury, Conn.
Bridgeport Brass Co., Bridgeport, Conn.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Hussey & Co., C. G., Pittsburgh, Pa.
Revere Copper & Brass Inc., New York, N. Y.
Rigidized Metals Corp., Buffalo, N. Y.
Roofing & Supply Co., Chattanooga, Tenn.

SHEETS, METAL, EMBOSSED

Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Rigidized Metals Corp., Buffalo, N. Y.
Sun Steel Co., Chicago, Ill.

SHEETS, METAL, LEAD

Alpha Metals, Inc., Jersey City, N. J.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Empire Metal Co., Syracuse, N. Y.
Federated Metals Div., American Smelting & Refining Co., New York, N. Y.
Flemm Lead Co., Inc., Long Island City, N. Y.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Illinois Zinc Co., Chicago, Ill.
Kirk & Son, Morris, Pa., Los Angeles, Calif.
National Lead Co., New York, N. Y.
Northwest Lead Co., Seattle, Wash.
Standard Rolling Mills Div. of Revere Copper and Brass Inc., Brooklyn, N. Y.
Weirton Steel Co., Weirton, W. Va.

SHEETS, METAL, SPECIAL METAL

American Brass Co., Waterbury, Conn. (Copper-silicon alloys)
American Silver Co., Inc., Flushing, N. Y.
Cheney Flashing Co., Trenton, N. J. (Copper-zinc alloy)
Colonial Alloys Co., Philadelphia, Pa. (Color treated)
Division Lead Co., Summit, Ill. (Non-ferrous)
Dow Chemical Co., Midland, Mich. (Magnesium)
Handy & Harman, New York, N. Y. (Silver, gold-silver alloys)
International Nickel Co., Inc., New York, N. Y. (Nickel & nickel alloys)
Lukens Steel Co., Coatesville, Pa. (Monel & Inconel)
Maysteel Products, Inc., Milwaukee, Wis.
Metals Div., Olin Mathieson Chemical Corp., East Alton, Ill. (Brass & bronze)
Revere Copper & Brass Inc., New York, N. Y. (Copper alloys)
Rigidized Metals Corp., Buffalo, N. Y. (Titanium)
Robertson Co., H. H., Pittsburgh, Pa. (Protected)
Youngstown Sheet & Tube Co., Youngstown, O.

SHEETS, METAL, STEEL, ALUMINUM COATED

Armco Steel Corp., Middletown, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.

SHEETS, METAL, STEEL, BLACK

Bethlehem Steel Co., Bethlehem, Pa.
Ceco Steel Products Corp., Chicago, Ill.
Inland Steel Products Co., Milwaukee, Wis.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Newport Steel Corp., Newport, Ky.
Pittsburgh Steel Co., Pittsburgh, Pa.
Republic Steel Corp., Cleveland, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.
Roofing & Supply Co., Chattanooga, Tenn.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.
Wood Steel Co., Alan, Conshohocken, Pa.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

SHEETS, METAL, STEEL, BLUE, POLISHED

Inland Steel Products Co., Milwaukee, Wis.
Rigidized Metals Corp., Buffalo, N. Y.

SHEETS, METAL, STEEL, COPPER BEARING, GALVANIZED

Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Bethlehem Steel Co., Bethlehem, Pa.
Ceco Steel Products Corp., Chicago, Ill.
Inland Steel Co., Chicago, Ill. (Copper alloy & zinc alloy)
Newport Steel Corp., Newport, Ky.
Reeves Steel & Mfg. Co., Dover, Ohio.
Republic Steel Corp., Cleveland, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.
Roofing & Supply Co., Chattanooga, Tenn.
Sharon Steel Co., Sharon, Pa.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Weirton Steel Co., Weirton, W. Va.
Wheeling Corrugating Co., Wheeling, W. Va.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

SHEETS, METAL, STEEL, CORRUGATED

Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio. (Galv.)
Bethlehem Steel Co., Bethlehem, Pa. (Galv.)
Ceco Steel Products Corp., Chicago, Ill. (Galvanized)
Inland Steel Products Co., Milwaukee, Wis.
International Steel Co., Evansville, Ind.
New Delphos Mfg. Co., Delphos, Ohio. (Galv.)
Newport Steel Corp., Newport, Ky. (Galv. & black)
Reeves Steel & Mfg. Co., Dover, Ohio. (Galv. & black)
Republic Steel Corp., Cleveland, Ohio. (Galv.)
Roofing & Supply Co., Chattanooga, Tenn.
Sharon Steel Corp., Sharon, Pa. (Black and galvanized)
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa. (Galv. & black)
Weirton Steel Co., Weirton, W. Va. (Galv.)
Wheeling Corrugating Co., Wheeling, W. Va.

SHEETS, METAL, STEEL, GALVANIZED

Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Bethlehem Steel Co., Bethlehem, Pa.
Ceco Steel Products Corp., Chicago, Ill.
Char-Gale Mfg. Co., Anoka, Minn.
Inland Steel Co., Chicago, Ill.
International Rolling Mill Products Corp., Chicago, Ill.
International Steel Co., Evansville, Ind.
Klauer Mfg. Co., Dubuque, Ia.
New Delphos Mfg. Co., Delphos, Ohio.
Newport Steel Corp., Newport, Ky.
Ralph Mfg. Co., Inc., Wadsworth, Ohio.
Reeves Steel & Mfg. Co., Dover, Ohio.
Republic Steel Corp., Cleveland, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.
Rolled Steel Products Div., Emergency Steel Service Corp., Skokie, Ill.
Roofing & Supply Co., Chattanooga, Tenn.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Weirton Steel Co., Weirton, W. Va.
Wheeling Corrugating Co., Wheeling, W. Va.

SHEETS, METAL, STEEL, GALVANNEALED

Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Newport Steel Corp., Newport, Ky.
Republic Steel Corp., Cleveland, Ohio.

Rigidized Metals Corp., Buffalo, N. Y.
Sharon Steel Corp., Sharon, Pa.
United States Steel Corp., Pittsburgh, Pa.

SHEETS, METAL, STEEL, PROTECTIVE COATED

American Steel Band Co., Pittsburgh, Pa.
Apollo Metal Works, Chicago, Ill.
Baltimore Porcelain Steel Corp., Baltimore, Md. (Porcelain)
Erie Enameling Co., Erie, Pa.
O'Sullivan Rubber Corp., Winchester, Va. (Plastic, ornamental, laminated)
Plasteel Products Corp., Washington, Pa.
Rigidized Metals Corp., Buffalo, N. Y.
Robertson Co., H. H., Pittsburgh, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

SHEETS, METAL, STEEL, STAINLESS

Allegheny Ludlum Steel Corp., Pittsburgh, Pa.
American Silver Co., Inc., Flushing, N. Y.
Apollo Metal Works, Chicago, Ill.
Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Crucible Steel Co., of America, Pittsburgh, Pa.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Eastern Stainless Steel Corp., Baltimore, Md.
Jessop Steel Co., Washington, Pa.
McLouth Steel Corp., Detroit, Mich.
Republic Steel Corp., Cleveland, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.
Sharon Steel Corp., Sharon, Pa.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Washington Steel Corp., Washington, Pa.

SHEETS, METAL, STEEL, TERNE PLATE

Armco Steel Corp., Middletown, Ohio.
Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio.
Follansbee Steel Corp., Follansbee, W. Va.
Inland Steel Co., Chicago, Ill.
Republic Steel Corp., Cleveland, O.
Rigidized Metals Corp., Buffalo, N. Y.
Roofing & Supply Co., Chattanooga, Tenn.
Sharon Steel Corp., Sharon, Pa.
Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
United States Steel Corp., Pittsburgh, Pa.
Weirton Steel Co., Weirton, W. Va.
Wheeling Corrugating Co., Wheeling, W. Va.

SHEETS, METAL, STEEL, TIN PLATE

Berger Mfg. Div., Republic Steel Corp., Canton, Ohio.
Bethlehem Steel Co., Bethlehem, Pa.
Granite City Steel Co., Granite City, Ill.
Inland Steel Co., Chicago, Ill.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Republic Steel Corp., Cleveland, Ohio.
Rigidized Metals Corp., Buffalo, N. Y.
Sharon Steel Corp., Sharon, Pa.
United States Steel Corp., Pittsburgh, Pa.
Weirton Steel Co., Weirton, W. Va.
Wheeling Corrugating Co., Wheeling, W. Va.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

SHEETS, METAL, ZINC

American Nickeloid Co., Peru, Ill.
Apollo Metal Works, Chicago, Ill.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Empire Metal Co., Syracuse, N. Y.
Illinois Zinc Co., Chicago, Ill.
Kirk & Son, Inc., Morris P., Los Angeles, Calif.
Matthiessen & Hegeler Zinc Co., La Salle, Ill.
New Jersey Zinc Co., New York, N. Y.
Rigidized Metals Corp., Buffalo, N. Y.

SHEETS, NON-METALLIC

Acme Asbestos Covering & Flooring Co., Chicago, Ill. (Asbestos cement).
Alsynite Co. of America, San Diego, Calif. (Translucent fiberglass)
American Hard Rubber Co., New York, N. Y. (Hard rubber)
Atlas Mineral Products Co., Mertztown, Pa. (Plastic, rigid polyvinyl chloride)
Campco Div., Chicago Molded Products Corp., Chicago, Ill.
Carey Mfg. Co., Philip, Cincinnati, Ohio. (Asbestos cement)
Celotex Corp., Chicago, Ill.
Chemold Co., Santa Monica, Calif. (Fiber glass)

Colonial Plastics Mfg. Co., Subsidiary Van Dorn Iron Works Co., Cleveland, O. (Polyvinyl chloride)
Firestone Plastics Co., Pottstown, Pa.
General Tire & Rubber Co., Industrial Products Div., Wabash, Ind. (Plastic)
Goodrich Chemical Co., B. F., Cleveland, O. (Plastic)
Hartwell & Sons, Inc., H. N., Boston, Mass. (Plastic)
Industrial Products Div., B. F. Goodrich Co., Marietta, O. (Plastic)
Johns-Manville, New York, N. Y. (Asbestos cement)
Kaykor Industries, Inc., Yardville, N. J. (Plastic, rigid polyvinyl chloride)
Keasbey & Mattison Co., Ambler, Pa. (Asbestos)
Keystone Asphalt Products Co., Chicago, Ill.
Meadows, Inc., W. R., Elgin, Ill.
Monsanto Chemical Co., St. Louis, Mo. (Polyethylene, vinyl, vinylidene)
Norristown Magnesia & Asbestos Co., Norristown, Pa. (Asbestos)
Plastex Corp., Columbus, O. (Plastic)
Resolite Corp., Zelienople, Pa.
Rohm & Haas Co., Philadelphia, Pa. (Plastic)
Ruberoid Co., New York, N. Y. (Asbestos cement; flat & corrugated)
Sall Mountain Co., Hamilton, O. (Asbestos)
Seiberling Rubber Co., Plastics Div., Newcomerstown, O.

SHEETS, TRANSLUCENT

See Panels, Plastic, Translucent Material

SHINGLES AND TILE, METAL

Berger Mfg. Div., Republic Steel Corp., Canton, Ohio. (Galv.)
Fingles Co., Baltimore, Md. (All metals)
Matthiessen & Hegeler Zinc Co., La Salle, Ill. (Zinc)
Miller & Doing, Brooklyn, N. Y.
Reynolds Metals Co., Louisville, Ky. (Aluminum)
Wheeling Corrugating Co., Wheeling, W. Va., (Steel shingles)
Wallace Co., William, Metalbestos Div., Belmont, Calif. (Painted tin and galv.)

SHUTTERS, DUCT, AUTOMATIC

See Louvers and Shutters, Automatically Controlled

SHUTTERS, DUCT, MANUAL

See Louvers and Shutters, Manually Controlled

SHUTTERS, EXTERIOR WALL

See Louvers and Shutters

SKYLIGHT LIFTS

See Lifts, Skylight

SKYLIGHTS

Alsynite Co. of America, San Diego, Calif.
American Steel Band Co., Pittsburgh, Pa.
Bettcher Plastics Co., Portland, Ore.
Biersach & Niedermeyer Co., Milwaukee, Wis.
Fingles Co., Baltimore, Md.
Gehri Co., Tacoma, Wash.
General Sheet Metal Works, Inc., Bridgeport, Conn.
LaCrosse Steel Roofing & Corrugating Co., LaCrosse, Wis.
Marco Co., East Orange, N. J.
Moeschl-Edwards Corrugating Co., Inc., Cincinnati, Ohio.
Overly, Lloyd H., Maryville, Tenn.
Overly Mfg. Co., Greensburg, Pa.
Pennsylvania Wire Glass Co., Philadelphia, Pa.
Perkinson, William J., Chicago, Ill.
Riggin Metal Products, Kankakee, Ill.
Robertson Co., H. H., Pittsburgh, Pa.
Schoedinger, F. O., Columbus, Ohio.
Sioux Steel Co., Sioux Falls, S. D.
Souther Iron Co., E. E., St. Louis, Mo.
Thomson Electric Welder Co., Lynn, Mass.
Tiffin Art Metal Co., Tiffin, Ohio.
University Fan & Blower Co., Berkeley, Calif.
Vallas, Lionel, Chicago, Ill.
Van Noorden Co., E., Boston, Mass.
Vent-O-Lite Co., Chicago, Ill.
Wasco Products, Inc., Cambridge, Mass.
Willis Steel Corp., Galesburg, Ill.

SLIP ROLL FORMERS

See Machines, Sheet Metal Working, Slip Roll Forming

SLITTING MACHINES

See Machines, Sheet Metal Working, Slitting

SMOKE PIPE

See Pipe and Fittings, Furnace

SNIPS AND SHEARS, BENCH AND HAND

Bartlett Mfg. Co., Detroit, Mich.
Bergman Tool Mfg. Co., Inc., Buffalo, N. Y.
Berridge Shear Co., Sturgis, Mich.
Beverly Shear Mfg. Co., Chicago, Ill.
Bremil Mfg. Co., Erie, Pa.
Cartwright & Son, J., Malaga, Calif.
Clauss Cutlery Co., Fremont, O.
Compton Shear Co., W. H., Newark, N. J.
Crescent Tool Co., Jamestown, N. Y.
Heinrich Tools, Inc., Racine, Wis.
Kidder Mfg. Co., Inc., J. F., Burlington, Vt.
Klenk's Aviation Snips, Wilmington, Del.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., Southington, Conn.
Penn Tool Co., Philadelphia, Pa.
Proto Tools, Los Angeles, Calif.
Snap-on Tools Corp., Kenosha, Wis.
Viking Shear Co., Erie, Pa.
Whitney Mfg. Co., W. A., Rockford, Ill.
Wiss & Sons Co., J., Newark, N. J.

SNOW GUARDS

See Guards, Snow

SOLDER, ALUMINUM

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Empire Metal Co., Syracuse, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Lenk Mfg. Co., Boston, Mass.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metalloy Products Co., Los Angeles, Calif.
Modern Engineering Co., St. Louis, Mo.
Ultralloy Corp., Chicago, Ill.

SOLDER, LEAD-TIN

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
American Products Corp., Chicago, Ill.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Benson Co., Inc., Alex R., Hudson, N. Y.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Smelting & Refining Corp., Chicago, Ill.
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Empire Metal Co., Syracuse, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Federated Metals Div., American Smelting & Refining Co., New York, N. Y.
Flemm Lead Co., Inc., Long Island City, N. Y.
Fluxolder Products Co., Detroit, Mich.
Fusion Engineering, Cleveland, O.
Glaser Lead Co., Inc., Brooklyn, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Mt. Vernon, Ia.
Kester Solder Co., Chicago, Ill.
Kirk & Son, Inc., Morris P., Los Angeles, Calif.
Klauser Mfg. Co., Dubuque, Ia.
Lenk Mfg. Co., Boston, Mass.
London Chemical Co., Melrose Park, Ill.
Lukens Metal Co., Thos. F., Philadelphia, Pa.
Mueller Brass Co., Port Huron, Mich.
National Lead Co., New York, N. Y.
New Delphos Mfg. Co., Delphos, O.
Northwest Lead Co., Seattle, Wash.

Ohmer Co., Geo. H., Dayton, O.
Ruby Chemical Co., Columbus, O.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Standard Rolling Mills Div. of Revere Copper and Brass Inc., Brooklyn, N. Y.
Tinit Mfg. Co., Inc., Denver, Colo.
Wonderod Corp., Philadelphia, Pa.

SOLDER, SILVER

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Empire Metal Co., Syracuse, N. Y.
Fusion Engineering, Cleveland, O.
General Plate Div., Metals & Controls Corp., Attleboro, Mass.
Handy & Harman, New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Mueller Brass Co., Port Huron, Mich.
United Wire & Supply Corp., Providence, R. I.

SOLDER, STAINLESS STEEL

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allen Co., L. B., Chicago, Ill.
Alpha Metals, Inc., Jersey City, N. J.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Empire Metal Co., Syracuse, N. Y.
Fusion Engineering, Cleveland, O.
Johnson Mfg. Co., Inc., Mt. Vernon, N. Y.
Kester Solder Co., Chicago, Ill.
Kirk & Son, Inc., Morris F., Los Angeles, Calif.
Lukens Metal Co., Thos. F., Philadelphia, Pa.

SOLDER, ZINC

Allen Co., Inc., L. B., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Empire Metal Co., Syracuse, N. Y.
Glaser Lead Co., Inc., Brooklyn, N. Y.

SOLDERING FLUX

See Flux

SOLDERING FURNACES

See Furnaces, Soldering

SOLDERING TORCHES

See Torches, Soldering

SOLENOID VALVES

See Valves, Solenoid

SOLVENTS, TANK, FUEL OIL

Ampion Corp., Long Island City, N. Y.
Barclay, Inc., Robert, Chicago, Ill.
Celco Corp., New York, N. Y.
Dearborn Chemical Co., Chicago, Ill.
Madden Corp., The, Chicago, Ill.
Metropolitan Refining Co., Inc., Long Island City, N. Y.
Monsanto Chemical Co., St. Louis, Mo.
Montgomery Chemical Co., Jenkintown, Pa.
Moreheat Distribution Co., Cincinnati, O.
North American Mogul Products Co., Cleveland, O.
Oakite Products Inc., New York, N. Y.
Pennsylvania Refining Co., Ohio Div., Cleveland, O.
Petroleum Solvent Corp., New York, N. Y.
Radiator Specialty Co., Charlotte, N. C.
Red Wing Oil Burner Co., Inc., Medford, Mass.
S. O. S. Products Co., Inc., Brooklyn, N. Y.
Saginaw Salt Products Co., Saginaw, Mich.
Shell Oil Co., New York, N. Y.

SOOT REMOVER

See Remover, Soot

SOUND LEVEL METERS

See Meters, Sound Level

SPOT WELDERS

See Welders, Spot

SPRAY GUNS

See Guns, Spray

STAINLESS STEEL SHEETS

See Sheets, Metal, Steel, Stainless

STAMPINGS, METAL

Ackermann Mfg. Co., Wheeling, W. Va.
Acme Mfg. Co., Philadelphia, Pa.
Aluminum Co. of America, Pittsburgh, Pa.
Aluminum Goods Mfg. Co., Manitowoc, Wis.
American Pulley Co., Philadelphia, Pa.
Berger Furnace Corp., Belle Vernon, Pa.
Bossert Div., Rockwell Spring and Axle Co., Utica, N. Y.
Campbell Stainless Products Co., Washington, Pa. (Stainless steel letters)
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Chicago Metal Mfg. Co., Chicago, Ill. (Rings)
Commercial Shearing & Stamping Co., Youngstown, Ohio.
Cronstroms, Inc., Minneapolis, Minn.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Dayton Rogers Mfg. Co., Minneapolis, Minn.
Detroit Stamping Co., Detroit, Mich.
Division Lead Co., Summit, Ill.
Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
Elgen Mfg. Corp., Long Island City, N. Y. (Vane runners)
Falstrom Co., Passaic, N. J.
Follansbee Steel Corp., Follansbee, W. Va.
Globe Machine & Stamping Co., Cleveland, Ohio.
Hupp Corp., Globe Stamping Div., Cleveland, Ohio.
Kirk & Blum Mfg. Co., Cincinnati, Ohio.
Lukens Steel Co., Coatesville, Pa.
Metals Div., Olin Mathieson Chemical Corp., East Alton, Ill.
Miller & Doing, Brooklyn, N. Y.
Morrison Products Inc., Cleveland, Ohio.
Morrison Steel Products, Inc., Buffalo, N. Y.
Moss Industries, Inc., Brooklyn, N. Y.
Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Ill.
National Metal Fabricators, Chicago, Ill.
New Delphos Mfg. Co., Delphos, Ohio.
New Monarch Machine & Stamping Co., Des Moines, Iowa.
Northwest Metal Products, Inc., Seattle, Wash.
Paine Co., Addison, Ill.
Radiation Furnace Corp., Benton Harbor, Mich.
Reichert Float & Mfg. Co., Toledo, O.
Republic Steel Corp., Cleveland, O.
Revere Copper & Brass Inc., New York, N. Y. (Copper & copper alloy)
Reynolds Metals Co., Louisville, Ky.
Shakeproof Div., Illinois Tool Works, Chicago, Ill.
Sheet Metal Specialty Div., Follansbee Steel Corp., Follansbee, W. Va.
Simpson Co., Oakland, Calif.
Standard Stamping & Perforating Co., Chicago, Ill.
Steinen Mfg. Co., Wm., Newark, N. J.
Tannowitz Works, Grand Rapids, Mich.
United States Register Co., Battle Creek, Mich.
Wheeling Corrugating Co., Wheeling, W. Va.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.
Worcester Pressed Steel Co., Worcester, Mass.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

STAMPINGS, STEEL FURNACE

Ackermann Mfg. Co., Wheeling, W. Va.
Berger Furnace Corp., Belle Vernon, Pa.
Commercial Shearing & Stamping Co., Youngstown, Ohio. (Heads for furnace domes & crescent radiators)
Mohawk Metal Products Co., Frankfort, N. Y. (Furnace shells and radiators)
Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Ill.
Radiation Furnace Corp., Benton Harbor, Mich.

STEEL TUBING

See Tubing, Steel

STERILIZERS, AIR

Air-Heat Corp., Chicago, Ill.
Air Purification Service, Inc., New York, N. Y.
Germatrol Corp., Pittsburgh, Pa.
Hanovia Chemical & Mfg. Co., Newark, N. J.
Harvey-Hill, Inc., St. Louis, Mo.
Iron City Chemical & Construction Corp., Glycolator Sales & Service Div., Pittsburgh, Pa.
Melco Products, Inc., Minneapolis, Minn.
Ozo Sales Corp., New Haven, Conn.
Sampson Chemical and Pigment Corp., Chicago, Ill.

STOKER CONTROLS

See Controls, Control Systems

STOKERS, DOMESTIC

Up to 61 lb per Hour

Allen Stoker Co., Allentown, Pa.
American Furnace Co., St. Louis, Mo.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Auburn Burner Co., Auburn, Ind.
Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
Automatic Firing Corp., St. Louis, Mo.
Canton Stoker Corp., Canton, Ohio.
Carpenter Heating & Stoker Co., Cleveland, Ohio.
Cooper Stoker Co., Pittsfield, Mass.
Crane Co., Chicago, Ill.
Electric Furnace-Man, Inc., Emmaus, Pa.
Frederick Iron & Steel, Inc., Frederick, Md.
Front Rank Furnace Co., Div. Liberty Foundry Co., St. Louis, Mo.
Gehl Bros. Mfg. Co., West Bend, Wis.
Gross-Aire Mfg. Co., St. Louis, Mo.
Hall-Neal Furnace Co., Indianapolis, Ind.
Heating Assurance, Inc., Spokane, Wash.
Hershey Machine & Foundry Co., Manheim, Pa.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Kol-Master Corp., Oregon, Ill.
Leas Co., H. Leslie, Monona, Iowa.
Meyer Furnace Co., Peoria, Ill.
National Steam Pump Co., Upper Sandusky, Ohio.
Nelson Bros. & Strom Co., Racine, Wis.
Northern Steel & Stoker Corp., Peoria, Ill.
Premium Coal & Oil Co., Cincinnati, Ohio.
Schwab Furnace Co., Milwaukee, Wis.
Schwab Safe Co., Lafayette, Ind.
Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
Stoker-Ola Mfg. Co., Peoria, Ill.
Sun-Fire Stoker Corp., New Albany, Ind.
Tropic-Air Stoker Co., Canton, Ohio.
Whiting Fire Power Products Corp., Superior, Wis.
Will-Burt Co., Orrville, Ohio.

STOKERS, INDUSTRIAL AND COMMERCIAL

61 lb to 300 lb per Hour

American Engineering Co., Philadelphia, Pa.
Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
Auburn Burner Co., Auburn, Ind.
Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
Automatic Firing Corp., St. Louis, Mo.
Canton Stoker Corp., Canton, Ohio.
Carpenter Heating & Stoker Co., Cleveland, Ohio.
Cooper Stoker Co., Pittsfield, Mass.
Detroit Stoker Co., Detroit, Mich.
Diamond Castings Co., Inc., Johnsonburg, Pa.
Electric Furnace-Man, Inc., Emmaus, Pa.
Flynn & Emrich Co., Baltimore, Md.
Frederick Iron & Steel, Inc., Frederick, Md.
Front Rank Furnace Co., Div. Liberty Foundry Co., St. Louis, Mo.
Fuel Savers, Inc., Harrisburg, Pa.
Gehl Bros. Mfg. Co., West Bend, Wis.
Gross-Aire Mfg. Co., St. Louis, Mo.
Hall-Neal Furnace Co., Indianapolis, Ind.
Heating Assurance, Inc., Spokane, Wash.
Hershey Machine & Foundry Co., Manheim, Pa.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Iron Fireman Mfg. Co., Cleveland, Ohio.
Kol-Master Corp., Oregon, Ill.
Leas Co., H. Leslie, Monona, Iowa.
Meyer Furnace Co., Peoria, Ill.
Nelson Bros. & Strom Co., Racine, Wis.
Ormsby-Osterman Co., St. Louis, Mo.
Premium Coal & Oil Co., Cincinnati, Ohio.
Rosedale Foundry & Machinery Co., Pittsburgh, Pa.
Schwab Furnace Co., Milwaukee, Wis.
Schwab Safe Co., Lafayette, Ind.
Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Stoker-Ola Mfg. Co., Peoria, Ill.
Sun-Fire Stoker Corp., New Albany, Ind.

Tropic-Air Stoker Co., Canton, Ohio.
Whiting Fire Power Products Corp., Superior, Wis.
Whitty Co., Inc., Boston, Mass.
Will-Burt Co., Orrville, Ohio.
Woolley Engineering Co., Detroit, Mich.

STOVE REPAIR PARTS

See Parts, Repair, Furnace and Stove

STUD WELDING GUN

See Welders, Spot

SUMMER COOLING UNITS

See Units, Air Conditioning

SWITCHES, MAGNETIC, MANUAL, TIME

See Controls

SYSTEMS, HEATING, SMALL PIPE

Consisting of furnace, plenum chamber, takeoff fittings, boots, elbows, small pipe

Adelta Mfg. Co., Philadelphia, Pa.
Berger Furnace Corp., Belle Vernon, Pa.
Char-Gale Mfg. Co., Anoka, Minn.
Coleman Co., Inc., Wichita, Kans.
Corbman Bros., Inc., Philadelphia, Pa.
General Automatic Products Corp., Baltimore, Md.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.
Henry Furnace Co., Medina, O.
Inland Steel Products Co., Milwaukee, Wis.
J & J Sheet Metal Co., Van Dyke, Mich.
Jettroaire, Inc., Pittsburgh, Pa.
Lennox Industries, Inc., Marshalltown, Iowa.
Majestic Co., Inc., Huntington, Ind.
Mueller Climatrol, Milwaukee, Wis.
Patten Co., J. V., Sycamore, Ill.
Premier Furnace Co., Dowagiac, Mich.
Ralph Mfg. Co., Inc., Wadsworth, O.
Surface Combustion Corp., Toledo, Ohio.
Williamson Co., The, Cincinnati, O.

TANK GAGES, FUEL OIL

See Gages, Tank, Fuel Oil

TANK SOLVENTS

See Solvents, Tank, Fuel Oil

TANKS, FUEL OIL, ACCESSORIES

Airtherm Mfg. Co., St. Louis, Mo.
Anderson Brass Co., Detroit, Mich. (Manual shutoff valve)
Bearlee Products Co., Green Bay, Wis. (Vent caps)
Furblo Co., Hermansville, Mich. (Stand)
Guardian Products Corp., Valve Div., Michigan City, Ind. (Valve)
Hays Mfg. Co., Erie, Pa. (Valves and fittings)
Mel-Gauge Co., New Haven, Conn. (Fittings and bushings)
Morse-Smith-Morse Co., Watertown, Mass. (Vent caps and valves)
Oil Equipment Mfg. Co., New Haven, Conn. (Oil storage tank fittings, vent caps, fill boxes)
Rockford Brass Works, Rockford, Ill.
Scully Signal Co., Melrose, Mass.
Universal Valve Co., Elizabeth, N. J. (Fittings, tank valves and bushings)

TANKS, STORAGE, FUEL OIL

Airtherm Mfg. Co., St. Louis, Mo.
Black, Sivalis & Bryson, Inc., Kansas City, Mo.
Crane Co., Chicago, Ill.
Furblo Co., Hermansville, Mich.
Kaustine Furnace & Tank Corp., Perry, N.Y.
Mohawk Metal Products Co., Inc., Frankfort, N. Y.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Rheem Mfg. Co., New York, N. Y.
Snappy Inc., Detroit Lakes, Minn.

TANKS, STORAGE, LP GAS

Scaife Co., Oakmont, Pittsburgh District, Pa.

TAPE, DUCT, ADHESIVE

For Sealing Joints

Dearborn Tape & Label Co., Dearborn, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Products Research Co., Los Angeles, Calif.

TEES

See Angles, Bars, Beams, Channels, and Tees

TEMPERATURE CONTROLS

See Controls, Control Systems

TEMPERATURE RECORDERS

See Recorders, Temperature

TESTERS, SMOKE

Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Dwyer Mfg. Co., F. W., Michigan City, Ind.

THERMOMETERS, INDICATING

Airguide Instrument Co., Chicago, Ill.
Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Bailey Meter Co., Cleveland, Ohio.
Bristol Co., Waterbury, Conn.
Defender Instrument & Regulator Co., St. Louis, Mo.
Dickson Co., Chicago, Ill.
Foxboro Co., Foxboro, Mass.
Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
G. M. Mfg. Co., New York, N. Y.
H-B Instrument Co., Philadelphia, Pa.
Hill & Co., E. Vernon, Lake Geneva, Wis.
Illinois Testing Laboratories, Inc., Chicago, Ill.
Leeds & Northrup Co., Philadelphia, Pa.
Manning, Maxwell & Moore, Inc., Stratford, Conn.
Marsh Corp., Jas. P., Skokie, Ill.
Marshalltown Mfg. Co., Marshalltown, Iowa.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Moeller Instrument Co., Richmond Hill, N. Y.
Palmer Thermometers, Inc., Cincinnati, Ohio.
Philadelphia Thermometer Co., Philadelphia, Pa.
Powers Regulator Co., Skokie, Ill.
Precision Thermometer & Instrument Co., Philadelphia, Pa.
Preferred Utilities Mfg. Corp., New York, N. Y.
Rochester Mfg. Co., Inc., Rochester, N. Y.
Taylor Instrument Companies, Rochester, N. Y.
United States Gauge Div., American Machine & Metals Inc., New York, N. Y.
Victory Engineering Corp., Union, N. J.
Weksler Thermometer Corp., Freeport, N. Y.
Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.
Wheelco Instruments Div., Barber-Coleman Co., Rockford, Ill.

THERMOSTATS

See Controls, Thermostats

THROUGH WALL FLASHINGS

See Flashings, Through Wall

TIME SWITCHES

See Controls, Switches, Time

TIMERS, WELDING

Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Eisler Engineering Co., Newark, N. J.
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
Peer, Inc., Benton Harbor, Mich.
Photoswitch Div., Electronics Corp. of America, Cambridge, Mass.
Sciaky Bros., Inc., Chicago, Ill.
Westinghouse Electric Corp., Pittsburgh, Pa.

TINNING

See Baths, Tinning

TIPS, DAMPER

See Clips and Tips, Damper

TOOLS, OIL BURNER REPAIR

Boston Machine Works, Lynn, Mass. (Nozzle extractor)
Delavan Mfg. Co., West Des Moines, Ia. (Nozzle extractor, nozzle changer, serviceman's kit, flame inspection mirror)
Eddington Metal Specialty Co., Eddington, Pa.
Kingsley Mfg. Co., New Haven, Conn.
Scully Signal Co., Melrose, Mass. (Electrode repair kit)

TOOLS, ROOFERS'

Adams Co., Dubuque, Iowa. (Scaffold brackets)
Aerol Products Co., Inc., South Hackensack, N. J. (Melting kettles, hoists, buckets & accessories)
Ajax Building Bracket Co., Cleveland, Ohio. (Brackets)

Belden Machine Co., New Haven, Conn. (Slater hammers, rippers & stakes)
 Efesco Products Co., Syracuse, N. Y. (Roof scrapers)
 Frey & Co., Frank P., Chicago, Ill. (All kinds)
 Hauck Mfg. Co., Brooklyn, N. Y. (Kettles)
 Levow, David, New York, N. Y. (Roof scrapers)
 Littleford Bros., Inc., Cincinnati, Ohio. (Roofing kettles)
 Matt Coil-Less Burner Co., Chicago, Ill. (Buckets, mops, kettles, etc.)
 Melaway Corp., Brandon, Wis.
 Moser & Son Mfg. Co., Bluffton, Ind. (Ladder jacks)
 Niagara Machine & Tool Works, Buffalo, N. Y. (Double seamers)
 Owens-Corning Fiberglas Corp., Toledo, Ohio. (Fiberglas mop yarn)
 Peck, Stow & Wilcox Co., Southington, Conn. (Seamers, tongs, etc.)
 Rose Mfg. Co., Denver, Colo. (Ladder shoes)
 Sperry & Co., D. R., Batavia, Ill. (Kettles)
 Stortz & Son, Inc., John, Philadelphia, Pa. (Tongs, seamers, scrapers, jointers, punches, hammers, rippers, stakes)

TOOLS, SHEET METAL WORKERS'

Acro Tool & Die Works, Chicago, Ill. (Portable saw)
 Air-Speed Tool Co., Los Angeles, Calif. (Pneumatic file & saw)
 Air-Vacuum Div., F. J. Littell Machine Co., Chicago, Ill. (Vacuum sheet lifter)
 Aladdin Mfg. Co., Kansas City, Mo. (Saw attachment for electric drill)
 Allen, H. D., Los Angeles, Calif. (Template transfer punches)
 American Electrical Heater Co., Detroit, Mich. (Soldering irons)
 Atkins Saw Div., Borg-Warner Corp., Indianapolis, Ind. (Band saw & hack saw blades)
 Bergman Tool Mfg. Co., Inc., Buffalo, N. Y. (Hand shears)
 Berridge Shear Co., Sturgis, Mich. (Double cutting pipe snips)
 Black & Decker Mfg. Co., Towson, Md. (Automatic screw driver, portable electric tapper, portable jig saw)
 Bostitch, Westerly, R. I. (Stapling tacker for insulation, stapling hammer)
 By-Buk Co., Los Angeles, Calif. (Adhesive corner pads)
 C W R Mfg. Co., Morro Bay, Calif. (Crimpers, clamps)
 Chicago Pneumatic Tool Co., New York, N. Y. (Rivet)
 Clark Co., Robert H., Beverly Hills, Calif. (Adjustable hole cutters & circle cutters)
 Clemson Bros., Inc., Middletown, N. Y. (Hack Saws)
 Crescent Tool Co., Jamestown, N. Y. (Scratch awls, pliers, screw drivers, wrenches)
 Dalsin Metal Products, Minneapolis, Minn. (Ladder jack)
 Damascus Steel Products Corp., Rockford, Ill. (Punches, chisels, star drills, nippers, etc.)
 Davis & Son Machine Works, Los Angeles, Calif. (Clip & button punch)
 Dayton Rogers Mfg. Co., Minneapolis, Minn. (Edge scriber)
 Desmond-Stephan Mfg. Co., Urbana, O. (Sheet metal worker's vise)
 Detroit Stamping Co., Detroit, Mich. (Toggle clamps)
 Division Lead Co., Summit, Ill. (Lead hammers)
 Dot-N-Dasher, Creskill, N. J. (Drafting template)
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Hammers, soldering coppers)
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y. (File and solder iron handles)
 Elgen Mfg. Corp., Long Island City, N. Y. (Portable hand brake)
 Eriez Mfg. Co., Erie, Pa. (Fanner magnet)
 Excelsior Tool and Machine Co., East St. Louis, Ill. (Sheet clamps)
 Fairmount Tool & Forging Co., Cleveland, Ohio. (Calking irons, file holders, pliers, solder paddle, chisels, punches, hammers)
 Fallsington Mfg. Co., Fallsington, Pa. (Clip punch, drive cleat notcher)
 Fox Noiseless Hammer Co., Media, Pa. (Seaming hammer)
 Garland Mfg. Co., Saco, Maine (Hammers and mallets)
 General Electric Co., Carbology Dept., Detroit, Mich. (Concrete drills)
 Hamilton Tool Co., The, Hamilton, O. (Portable table)
 Hexdall Co., A. M., Morris, Ill. (Seam openers & hammers)
 Hub Specialty Co., Reading, Mass. (Awl)
 Imperial Brass Mfg. Co., Chicago, Ill. (Tube flaring)
 Independent Blade Co., East Haven, Conn. (Saw blades)
 Independent Blade Co., Joliet, Ill. (Portable saw blades)
 Interstate Drop Forge Co., Milwaukee, Wis. (Button presses, squeezer tongs)
 Interstate Sales Co., New York, N. Y. (Angle meters & center finders)
 Jaco Devices Co., Hingham, Mass. (Portable saw attachment for drill)
 Johnson, Inc., Wm., Newark, N. J. (Rivet sets)

Johnson Ladder Shoe Co., Eau Claire, Wis. (Rubber ladder shoes, vise jaws, rubber knee pads, rubber mallets)
 Kennametal Inc., Latrobe, Pa. (Masonry & rock drill bits)
 Kett Tool Co., Cincinnati, O. (Portable drill saw)
 Lapeer Mfg. Co., Detroit, Mich. (Vise wrench, toggle clamps)
 Levow, David, New York, N. Y. (Portable saw gun, sheet metal clamp)
 Lufkin Rule Co., Saginaw, Mich. (Rules: tapes, flexible, circumference, etc.; center punches, scribes, etc.)
 Lyon Metal Products, Inc., Aurora, Ill. (Stock cart, tool stand, tool boxes & work benches)
 Magnetool Div., Multifinish Mfg. Co., Detroit, Mich. (Magnetic lifter, magnetic floor sweepers)
 Malco Products, Minneapolis, Minn. (Drill saw blades, pipe crimpers, duct holder clamps, seamers, notchers, snap lock punches, scratch awls)
 Maplewood Machinery Co., Chicago, Ill. (Trammels, marking tools)
 Maxant Button & Supply Co., Chicago, Ill. (Eyelet pliers, staplers)
 Melaway Corp., Brandon, Wis.
 Merchandising & Mfg. Associates, Inc., Lancaster, Pa. (Rivet cutters, shrinkers, stretchers, chisels, contour scribes & joggling blocks)
 Metalcraft Engineering Co., Lincoln, Nebr. (Drive cleat edge turner)
 Mid-States Welder Mfg. Co., Chicago, Ill. (Portable electric saw)
 Millers Falls Co., Greenfield, Mass. (Hack saw blades, saw attachment)
 Milwaukee Electric Tool Corp., Milwaukee, Wis. (Portable hack saw)
 Misener Mfg. Co., Inc., Syracuse, N. Y. (Hole saws)
 Moser & Son Mfg. Co., Bluffton, Ind. (Spouting tripods)
 New England Carbide Tool Co., Inc., Cambridge, Mass. (Masonry drill bits)
 Niagara Machine & Tool Works, Buffalo, N. Y. (Stakes, hammers, groovers, hollow punches, etc.)
 Nielsen, Inc., E. V., Stamford, Conn. (Portable hammer)
 Nobur Mfg. Co., Burbank, Calif. (Deburring tool)
 Oster Mfg. Co., John, Milwaukee, Wis. (Portable electric saws)
 Owens Co., H., Culver City, Calif. (Pattern developer)
 Packham Crimper Co., Mechanics-Burgh, Ohio. (Crimping tongs)
 Peck, Stow & Wilcox Co., Southington, Conn. (Hammers, awls, rivet sets, groovers, wing dividers, circumference rules, ferrule formers, stakes)
 Penn Tool Co., Philadelphia, Pa. (Punches, chisels & edge tools)
 Pennsylvania Saw Corp., Wellesley Hills, Mass. (Hand saw set)
 Petersen Mfg. Co., Inc., DeWitt, Nebr. (Clamps)
 Pioneer Tool Co., Racine, Wis. (Pipe crimpers, gutter clamps, adjustable saw handles, scratch awls, ladder brackets)
 Powder Power Tool Corp., Portland, Ore. (Cartridge powered fasteners)
 Powers Wire Products Co., Detroit, Mich. (Stapler)
 Price & Rutzebeck, Hayward, Calif. (Saw attachment for electric drill)
 Producers & Distributors, Inc., Allentown, Pa. (Metal cutting saw attachment for electric drill)
 Rapidesign, Inc., Glendale, Calif. (Templates)
 Rawlplug Co., Inc., New York, N. Y. (Masonry drills)
 RCS Tool Corp., Joliet, Ill. (Power portable saw attachment)
 Ramset Fastening System, Winchester-Western Div., Olin Mathieson Chemical Corp., Cleveland O. (Powder-actuated)
 Reiner & Campbell Co., Inc., Newark, N. J. (Dividers & notchers)
 Rotary Concrete Drill Co., Pasadena, Calif. (Drill bits)
 Safety Nail Driver Corp., Clifton, N. J. (Masonry nail driver)
 Saw-Mor Tool & Blade Co., Chicago, Ill. (Hack saw attachment for electric drill)
 Schaefer Brush Mfg. Co., Milwaukee, Wis. (Steel brushes, pipe and tube cleaning brushes)
 Scotco Products Co., Beverly, Mass. (Soldering gun)
 Skil Corporation, Chicago, Ill. (Portable power tools)
 Sheridan-Gray, Inc., Palos Verdes Estates, Calif.
 Simonds Saw & Steel Co., Fitchburg, Mass. (Hack saws and blades, metal files)
 Snap-on Tools Corp., Kenosha, Wis. (Wrenches, hammers, rules, etc.)
 Stanley Electric Tools Div., The Stanley Works, New Britain, Conn. (Portable electric shear, hammers, squares, chisels, etc.)
 Stortz & Son, Inc., John, Philadelphia, Pa. (Hammer, punches, chisels, rivet sets)
 Termite Drills, Inc., Pasadena, Calif. (Concrete drill bits)
 Thor Power Tool Co., Aurora, Ill. (Saw blades and attachment)

Time Saver Tools, Inc., Mundelein, Ill. (Drill bits)
 Topflight Corp., York, Pa. (Jigs, riveters, dimplers, rivet removers, scribing discs)
 Tri-Saw Corp., St. Louis, Mo. (Portable power saw)
 Utica Drop Forge & Tool Corp., Utica, N. Y. (Non-ferrous lap-welding dies)
 Vital Products Mfg. Co., Cleveland, Ohio. (Caulking guns & cartridges)
 Vulcan Electric Co., Div. Consolidated Electric Lamp Co., Inc., Danvers, Mass. (Electric solder pots)
 Ward Machinery Co., Chicago, Ill. (Bender)
 Wassco Electric Products Corp., Joliet, Ill. (Electric soldering tool)
 Wedgelock Co., North Hollywood, Calif. (Jig fasteners, clamps, sheet metal fasteners)
 Whipple Sheet Metal Works, Inc., Lansing, Mich. (Clamps)
 Whitney Mfg. Co., W. A., Rockford, Ill. (Riveting and setting hammers, portable lever punches, punches and dies, shears, notching punches)
 Whitney Metal Tool Co., Rockford, Ill. (Aircraft rivet squeezers, hand seamers, hammers, punches, rivet sets, hand crimpers, awls)
 Wilder Mfg. Co., Inc., Carmel, Calif.
 Wyzenbeek & Staff, Inc., Chicago, Ill. (Hole cutters, saw attachments)

TOPS, CHIMNEY

See Caps and Tops, Chimney

TORCHES, BRAZING, CUTTING, WELDING AND OXY-ACETYLENE

Aeroil Products Co., Inc., South Hackensack, N. J.
 Air Products, Emmaus, Pa.
 Air Reduction Sales Co., New York, N. Y.
 American Products Corp., Chicago, Ill.
 Bastian-Blessing Co., Chicago, Ill.
 Black Mfg. Co., Harrison, N. J.
 Dockson Corp., Detroit, Mich.
 Eutectic Welding Alloys Corp., Flushing, N. Y.
 Goss Gas, Inc., Glenshaw, Pa.
 Harris Calorific Co., Cleveland, Ohio.
 K-G Equipment Co. (Inc.), Allentown, Pa.
 Lee Co., K. O., Aberdeen, S. D.
 Lincoln Electric Co., Cleveland, O.
 Linde Air Products Co., New York, N. Y.
 Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
 Marquette Mfg. Co., Inc., Minneapolis, Minn.
 Mid-States Welder Mfg. Co., Chicago, Ill.
 Minn-Kota Foundry & Mfg. Co., Fargo, N. D.
 Modern Engineering Co., St. Louis, Mo.
 National Cylinder Gas Co., Chicago, Ill.
 National Welding Equipment, San Francisco, Calif.
 Ransome Co., Emeryville, Calif.
 Reiner & Campbell Co., Inc., Newark, N. J.
 Sight Feed Generator Co., W. Alexandria, O.
 Smith Welding Equipment Corp., Minneapolis, Minn.
 Velocity-Power Tool Co., Pittsburgh, Pa.
 Victor Equipment Co., San Francisco, Calif.
 Weldit, Inc., Detroit, Mich.

TORCHES, SOLDERING

Acet-A-Tips Co., Chicago, Ill.
 Air Reduction Sales Co., New York, N. Y.
 Bastian-Blessing Co., Chicago, Ill.
 Bernz Co., Otto, Rochester, N. Y.
 Clayton & Lambert Mfg. Co., Louisville, Ky.
 Dockson Corp., Detroit, Mich.
 Fusion Engineering, Cleveland, Ohio.
 Goss Gas Inc., Glenshaw, Pa.
 Harris Calorific Co., Cleveland, Ohio.
 Homes, Inc., Charles A., Baldwin, N. Y. (Gas)
 Insto-Gas Corp., Detroit, Mich.
 Johnson Gas Appliance Co., Cedar Rapids, Iowa.
 Lenk Mfg. Co., Boston, Mass.
 Linde Air Products Co., New York, N. Y.
 Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
 Marquette Mfg. Co., Inc., Minneapolis, Minn.
 Minn-Kota Foundry & Mfg. Co., Fargo, N. D.
 Modern Engineering Co., St. Louis, Mo.
 Mutual Liquid Gas & Equipment Co., Gardena, Calif.
 National Cylinder Gas Co., Chicago, Ill.
 National Welding Equipment, San Francisco, Calif.
 Prepo Corp., Edgerton, Wis.
 Ransome Co., Emeryville, Calif.
 Reiner & Campbell Co., Inc., Newark, N. J.
 Reliable Gas Products Co., Cedar Rapids, Ia.
 Sanders, J. A., Fulton, N. Y.

Sight Feed Generator Co., West Alexandria, Ohio.
 Smith Welding Equipment Corp., Minneapolis, Minn.
 Tinit Mfg. Co., Inc., Denver, Colo.
 Torit Mfg., Co., St. Paul, Minn.
 Turner Brass Works, Sycamore, Ill.
 Unique Mfg. Co., Inc., Chicago, Ill.
 Velocity-Power Tool Co., Pittsburgh, Pa.
 Weldit, Inc., Detroit, Mich.

TOWERS, COOLING, ATMOSPHERIC, RESIDENTIAL

Binks Mfg. Co., Chicago, Ill.
 Dover Mfg. Co., Independence, Mo.
 Fluor Corp., Ltd., The, Los Angeles, Calif.
 Lilie-Hoffman Cooling Towers, Inc., St. Louis, Mo.
 Marley Co., The, Kansas City, Mo.
 Peerless Products Div., United Cooling Towers, Inc., North Little Rock, Ark.
 Pennsylvania Engineering Corp., New Castle, Pa.
 Phillips Cooling Tower Co., Inc., Brooklyn, N. Y.
 Santa Fe Tank & Tower Co., Los Angeles, Calif.
 Thermal Agency, Houston, Tex.
 TOT Towers, Inc., Houston, Tex.
 Toungate & Coats, Austin, Tex.
 United Cooling Tower Co., Kansas City, Mo.
 United States Cooling Tower Co., Div. Heatcraft Co., Louisville, Ky.
 Water Cooling Equipment Corp., St. Louis, Mo.
 Water Cooling Tower Co., Chicago, Ill.

TOWERS, COOLING, ATMOSPHERIC, RESIDENTIAL

Acme Industries Inc., Jackson, Mich.
 American Coils Co., Newark, N. J.
 Ayres, Inc., Houston, Tex.
 Baldwin-Ward Mfg. Co., Ottawa, Kans.
 Baltimore Aircoil Co., Inc., Baltimore, Md.
 Binks Mfg. Co., Chicago, Ill.
 Buensod-Stacey, Inc., New York, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Carrier Corp., Syracuse, N. Y.
 Clime-Matic Corp., South Norwalk, Conn.
 Cool-Ette, Inc., Detroit, Mich.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Deansteel Products, San Antonio, Tex.
 Dover Mfg. Co., Independence, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Fluor Corp., Ltd., The, Los Angeles, Calif.
 Fulton Steelcraft Co., Swanton, O.
 Goodfellow Co., Inc., E. D., Memphis, Tenn.
 Governair Corp., Oklahoma City, Okla.
 Halstead & Mitchell, Pittsburgh, Pa.
 Havens Structural Steel Co., Kansas City, Mo.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Kennard Corp., St. Louis, Mo.
 Knobloch Co., Jim, Newport, Ky.
 Kramer-Trenton Co., Trenton, N. J.
 Larkin Coils, Inc., Atlanta, Ga.
 Lilie-Hoffman Cooling Towers, Inc., St. Louis, Mo.
 Marley Co., The, Kansas City, Mo.
 Marlo Coil Co., St. Louis, Mo.
 McQuay, Inc., Minneapolis, Minn.
 Morris Sheet Metal Works, Columbus, O.
 Niagara Products Co., Phoenix, Ariz.
 Peerless Products Div., United Cooling Towers, Inc., North Little Rock, Ark.
 Pennsylvania Engineering Corp., New Castle, Pa.
 Phillips Cooling Tower Co., Inc., Brooklyn, N. Y.
 Refrigeration Engineering, Inc., Los Angeles, Calif.
 Santa Fe Tank & Tower Co., Inc., Los Angeles, Calif.
 Silvercraft, Inc., Louisville, Ky.
 Sun-Fire Stoker Corp., New Albany, Ind.
 TOT Towers, Inc., Houston, Tex.
 Toungate & Coats, Austin, Tex.
 United Cooling Tower Co., Kansas City, Mo.
 United States Cooling Tower Co., Div. Heatcraft Co., Louisville, Ky.
 Vogt Machine Co., Henry, Louisville, Ky.
 Water Cooling Equipment Corp., St. Louis, Mo.
 Water Cooling Tower Co., Chicago, Ill.
 Worthington Corp., Harrison, N. J.

TRANSFORMERS, IGNITION

Burnrite Valve Mfg. Corp., Mt. Vernon, N. Y.
 Dongan Electric Mfg. Co., Detroit, Mich.

Dormeyer Industries, Chicago, Ill.
 General Controls Co., Glendale, Calif.
 General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
 Harvey, Inc., Sid., Valley Stream, N. Y.
 HomEase Products Div. of Bogue Electric Mfg. Co., Paterson, N. J.
 Jefferson Electric Co., Bellwood, Ill.
 Norris-Thermador Corp., Los Angeles, Calif.
 Nu-Way Corp., The, Rock Island, Ill.
 Union Electric & Mfg. Co., Jersey City, N. J.
 Webster Electric Co., Racine, Wis.

TRANSFORMERS, LOW VOLTAGE

Acme Electric Corp., Cuba, N. Y.
 Barber-Colman Co., Rockford, Ill.
 Crown Controls Co., Inc., New Bremen, Ohio.
 Dongan Electric Mfg. Co., Detroit, Mich.
 Dormeyer Industries, Chicago, Ill.
 Eisler Engineering Co., Newark, N. J.
 General Controls Co., Glendale, Calif.
 General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
 Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
 Jefferson Electric Co., Bellwood, Ill.
 Mercoind Corp., Chicago, Ill.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Norris-Thermador Corp., Los Angeles, Calif.
 NuTone, Inc., Cincinnati, O.
 Taylor-Winfield Corp., Warren, Ohio.
 Union Electric & Mfg. Co., Jersey City, N. J.
 Wagner Electric Corp., St. Louis, Mo.
 Westinghouse Electric Corp., Pittsburgh, Pa.

TRANSMISSIONS, VARIABLE SPEED

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
 American Pulley Co., Philadelphia, Pa.
 Dodge Mfg. Corp., Mishawaka, Ind.
 Lewellen Mfg. Co., Columbus, Ind.
 Lima Electric Motor Co., The, Lima, O.
 Link-Belt Co., Chicago, Ill.
 Lovejoy Flexible Coupling Co., Chicago, Ill.
 Philadelphia Gear Works, Inc., Philadelphia, Pa.
 Reliance Electric & Engineering Co., Cleveland, Ohio.
 Sterling Electric Motors, Inc., Los Angeles, Calif.
 U. S. Electrical Motors, Inc., Los Angeles, Calif.

TRIM, ORNAMENTAL

See Moulding and Trim, Ornamental

TRUCK BODIES

See Bodies and Accessories, Truck

TRUCKS, MOTOR

Chevrolet Motor Div. General Motors Corp., Detroit, Mich.
 Dodge Div., Chrysler Corp., Detroit, Mich.
 Ford Motor Co., Dearborn, Mich.
 GMC Truck & Coach Div., General Motors Corp., Pontiac, Mich.
 International Harvester Co., Motor Truck Div., Chicago, Ill.

TRUCKS, WAREHOUSE

Big Joe Mfg. Co., Chicago, Ill.
 Elwell-Parker Electric Co., Cleveland, O.
 Lamson Mobilift Corp., Portland, Ore. (Lift)
 Yale & Towne Mfg. Co., The, Philadelphia, Pa.

TUBING, ALUMINUM

Aluminum Co. of America, Pittsburgh, Pa.
 American Brass Co., Waterbury, Conn.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
 Harvey Machine Co., Inc., Torrence, Calif.
 Kaiser Aluminum & Chemical Corp., Oakland, Calif.
 Lewin-Mathes, Lewis Metals Div., St. Louis, Mo.
 Penn Brass & Copper Co., Erie, Pa.
 Revere Copper & Brass Inc., New York, N. Y.
 Reynolds Metals Co., Louisville, Ky.
 United Wire & Supply Corp., Providence, R. I.
 Wolverine Tube Div. of Calumet & Hecla, Inc., Detroit, Mich.

TUBING, COPPER

American Brass Co., Waterbury, Conn.
 Brass & Copper Import, Inc., New York, N. Y.
 Bridgeport Brass Co., Bridgeport, Conn.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.

Hussey & Co., C. G., Pittsburgh, Pa.
 Kensico Tube Co., Mt. Kisco, N. Y.
 Lewin-Mathes Co., Lewin Metals Div., St. Louis, Mo.
 Mueller Brass Co., Port Huron, Mich.
 Penn Brass & Copper Co., Erie, Pa.
 Phelps Dodge Copper Products Corp., British American Tube Div., New York, N. Y.
 Revere Copper & Brass Inc., New York, N. Y.
 United Wire & Supply Corp., Providence, R. I.
 Wolverine Tube Div. of Calumet & Hecla, Inc., Detroit, Mich.
 York Corp., York, Pa.

TUBING, NICKEL AND NICKEL ALLOY

Bundy Tubing Co., Detroit, Mich.
 Crucible Steel Co. of America, Pittsburgh, Pa.
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y.
 International Nickel Co., Inc., New York, N. Y.
 Revere Copper & Brass Inc., New York, N. Y.
 Wolverine Tube Div. of Calumet & Hecla, Inc., Detroit, Mich.
 Youngstown Welding & Engineering Co., Youngstown, O. (Monel)

TUBING, PLASTIC

Acadia Synthetic Products Div., Western Felt Works, Chicago, Ill.
 American Agile Corp., Bedford, O.
 Aqua-Therm, Inc., Dayton, O.
 American Hard Rubber Co., New York, N. Y.
 Carlon Products, Cleveland, Ohio.
 Colonial Plastics Mfg. Co., Subsidiary Van Dorn Iron Works Co., Cleveland, O.
 Commercial Plastics Co., Chicago, Ill.
 Easton Plastics Co., Easton, Pa.
 General Electric Co., Chemical and Metallurgical Div., Pittsfield, Mass.
 Hartwell & Sons, Inc., H. N., Boston, Mass.
 Haveg Corp., Newark, Del.
 Irvington Varnish & Insulator Div., Minnesota Mining & Mfg. Co., Irvington, N. J.
 Mills Corp., Elmer E., Chicago, Ill.
 Monsanto Chemical Co., St. Louis, Mo.
 Mueller Brass Co., Port Huron, Mich.
 Pacific States Felt & Mfg. Co., Inc., San Francisco, Calif.
 Plastex Corp., Columbus, O.
 Republic Steel Corp., Cleveland, O.
 Sandee Mfg Co., Chicago, Ill.
 Saran Lined Pipe Co., Ferndale, Mich.
 United States Rubber Co., New York, N. Y.
 Yardley Plastics Co., Columbus, O.

TUBING, STEEL

Armco Steel Corp., Middletown, Ohio.
 Bethlehem Steel Co., Bethlehem, Pa.
 Bundy Tubing Co., Detroit, Mich.
 Crucible Steel Co. of America, Pittsburgh, Pa.
 Dieckmann Co., Ferdinand, Cincinnati, Ohio. (Galv. speaking tube)
 H-P Products, Inc., Louisville, O.
 Jones & Laughlin Steel Corp., Pittsburgh, Pa.
 Laclede Steel Co., St. Louis, Mo.
 Michigan Steel Tube Products Co., Detroit, Mich.
 National Tube Div., U. S. Steel Corp., Pittsburgh, Pa.
 Pittsburgh Steel Co., Pittsburgh, Pa.
 Republic Steel Corp., Cleveland, Ohio.
 Revere Copper & Brass, Inc., New York, N. Y. (Welded)
 Sharon Steel Corp., Sharon, Pa.
 Steel & Tubes Div., Republic Steel Corp., Cleveland, Ohio.
 Timken Roller Bearing Co., Canton, Ohio.
 Wolverine Tube Div. of Calumet & Hecla, Inc., Detroit, Mich.
 Youngstown Sheet & Tube Co., Youngstown, Ohio.

TUBING, STEEL, STAINLESS

Allegheny-Ludlum Steel Corp., Pittsburgh, Pa.
 Chase Brass & Copper Co., Inc., Waterbury, Conn.
 Crucible Steel Co. of America, Pittsburgh, Pa.
 Damascus Tube Co., Greenville, Pa.
 National Tube Div., U. S. Steel Corp., Pittsburgh, Pa.
 Republic Steel Corp., Cleveland, Ohio.
 Steel & Tubes Div., Republic Steel Corp., Cleveland, Ohio.
 Timken Roller Bearing Co., Canton, Ohio.
 Youngstown Welding & Engineering Co., Youngstown, O.

TURNING VANES

See Vanes, Duct Turning

UNIT HEATERS

See Heaters, Unit

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER ONLY, CONSISTING OF BLOWER, FILTER AND COOLING COIL

**With Connection to Remote Condensing Unit or Cold Water
Supply for Duct Distribution of Air**

Addison Products Co., Addison, Mich.
Air Conditioning Engineering Co., Cambridge, Mass.
Air Products, St. Louis, Mo.
Airtemp Div., Chrysler Corp., Dayton, Ohio
American Coils Co., Newark, N. J.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning
Div., New York, N. Y.
Berger Furnace Corp., Belle Vernon, Pa.
Brown Products Corp., Forest Hills, N. Y.
Bush Mfg. Co., West Hartford, Conn.
Carrier Corp., Syracuse, N. Y.
Clarage Fan Co., Kalamazoo, Mich.
Coleman Co., Inc., Wichita, Kans.
Cool-Ette, Inc., Detroit, Mich.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Deansteel Products, San Antonio, Tex.
Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp.,
Los Angeles, Calif.
Frigidaire Div., General Motors Corp., Dayton, O.
Governair Corp., Oklahoma City, Okla.
Hastings Air Conditioning Co., Inc., Hastings, Nebr.
Hastings Air Control, Inc., Omaha, Nebr.
Henry Furnace Co., Medina, O.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Iron Fireman Mfg. Co., Cleveland, O.
Kennard Corp., St. Louis, Mo.
Kramer Trenton Co., Trenton, N. J.
Larkin Coils, Inc., Atlanta, Ga.
Marlo Coil Co., St. Louis, Mo.
McQuay, Inc., Minneapolis, Minn.
Meyer Furnace Co., Peoria, Ill.
Mueller Climatrol, Milwaukee, Wis.
National-U. S. Radiator Corp., Johnstown, Pa.
Olsen Mfg. Co., The C. A., Elyria, O.
Patten Co., J. V., Sycamore, Ill.
Peerless Furnace & Foundry Co., Indianapolis, Ind.
Refrigeration Appliances, Inc., Chicago, Ill.
Refrigeration Economics Co., Inc., Canton, Ohio.
Refrigeration Engineering, Inc., Los Angeles, Calif.
Rheem Mfg. Co., Chicago, Ill.
Round Oak Co., Inc., Dowagiac, Mich.
Rybolt Heater Co., Ashland, O.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Typhoon Air Conditioning Co., Div. of Hupp Corp. Brooklyn,
N. Y.
United States Air Conditioning Corp., Minneapolis, Minn.
Viking Mfg. Corp., Cleveland, O.
Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
Williamson Co., The, Cincinnati, O.
York Corp., York, Pa.
York-Shipley, Inc., York, Pa.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER ONLY, CONSISTING OF CONDENSING UNIT, FILTER, AND COOLING COIL (WITH BLOWER)

For Connection to Existing Warm Air System

Air Conditioning Engineering Co., Cambridge, Mass.
Air Products, St. Louis, Mo.
Airtemp Div., Chrysler Corp., Dayton, Ohio
Airtron Corp., Holland, O.
Amana Refrigeration Inc., Amana, Ia.
American Furnace Co., St. Louis, Mo.
American Radiator & Standard Sanitary Corp., Air Conditioning
Div., New York, N. Y.
Armstrong Furnace Co., Columbus, O.
Auburn Burner Co., Auburn, Ind.
Automatic Firing Corp., St. Louis, Mo.
Bal-Air, Inc., Nashville, Tenn.
Bard Mfg. Co., Bryan, O.
Barkow Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
Berger Furnace Corp., Belle Vernon, Pa.
Besser Metal Products Corp., Charlotte, N. C.
Bishop & Babcock Mfg. Co., Cleveland, O.
Blissfield Mfg. Co., Blissfield, Mich.
Bonair Products, Inc., Darby, Pa.

Brucker, Inc., M., Chicago, Ill.
Brunner Mfg. Co., Utica, N. Y.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Carrier Corp., Syracuse, N. Y.
Central States Mfg. Co., Inc., Arkansas City, Kans.
Clime-Matic Corp., South Norwalk, Conn.
Coleman Co., Inc., Wichita, Kans.
Columbia Specialty Co., Inc., Chevy Chase, Md.
Conco Engineering Works, Heating Div., Mendota, Ill.
Cool-Ette, Inc., Detroit, Mich.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Day & Night Div., Carrier Corp., Monrovia, Calif.
Deering Air Conditioning Co., Cincinnati, O.
Dowagiac Steel Furnace Co., Dowagiac, Mich.
Farquhar Furnace Co., Wilmington, O.
Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
Fresh'nd-Aire Co., Div. of Cory Corp., Chicago, Ill.
Frigidaire Div., G. M. Corp., Dayton, Ohio
General Air Conditioning Corp., Los Angeles, Calif.
General Automatic Products Corp., Baltimore, Md.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.
Gibson Refrigerator Co., Greenville, Mich.
Governair Corp., Oklahoma City, Okla.
Great Northern Mfg. Corp., Chicago, Ill.
Harvey-Hill, Inc., St. Louis, Mo.
Hastings Air Conditioning Co., Inc., Hastings, Nebr.
Hastings Air Control, Inc., Omaha, Nebr.
Heating Equipment Mfg. Co., San Francisco, Calif.
Heil Co., Milwaukee, Wis.
Henry Furnace Co., Medina, O.
Hess Co., The, Chicago, Ill.
Hupp Corp., Globe Stamping Div., Cleveland, O.
Illinois Iron & Bolt Co., Carpentersville, Ill.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
Mich.
International Heater Co., Utica, N. Y.
Iron Fireman Mfg. Co., Cleveland, O.
Jettronaire, Inc., Pittsburgh, Pa.
King Refrigerator Co., Glendale, N. Y.
Lennox Industries, Inc., Marshalltown, Iowa.
Lincoln Furnace Co., Inc., Hawthorne, N. J.
Lipman Refrigeration Div., Yates-American Machine Co., Beloit,
Wis.
Made-Rite Co., Inc., Newport, Ky.
Majestic Co., Inc., Huntington, Ind.
Mayflower Air Conditioners, Inc., St. Paul, Minn.
Meyer Furnace Co., Peoria, Ill.
Midwest Automatic Control Co., Des Moines, Ia.
Mitchell Mfg. Co., Chicago, Ill.
Morrison Steel Products, Inc., Buffalo, N. Y.
Mueller Climatrol, Milwaukee, Wis.
National-U. S. Radiator Corp., Johnstown, Pa.
Norman Products Co., Inc., Columbus, O.
Olsen Mfg. Co., The C. A., Elyria, O.
Patten Co., J. V., Sycamore, Ill.
Payne Div. of Carrier Corp., Monrovia, Calif.
Peerless Furnace & Foundry Co., Indianapolis, Ind.
Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
Pennsylvania Furnace & Iron Co., Warren, Pa.
Perfection Industries, Div. of Hupp Corp., Cleveland, O.
Philco Corp., Philadelphia, Pa.
Refrigeration Economics, Inc., Canton, O.
Rheem Mfg. Co., Chicago, Ill.
Richmond Radiator Co., Affil. Reynolds Metals Co., Metuchen,
N. J.
Round Oak Co., Inc., Dowagiac, Mich.
Rybolt Heater Co., Ashland, O.
Schnacke, Inc., Evansville, Ind.
Serval, Inc., Evansville, Ind.
Shana Mfg., Inc., Chicago, Ill.
Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
Sterling Air Conditioning Corp., Gastonia, N. C.
Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
Superior Furnace & Mfg. Co., Plymouth, Mich.
Surface Combustion Corp., Toledo, O.
Sutton Corp., O. A., Wichita, Kans.
Thatcher Furnace Co., Garwood, N. J.
Timken Silent Automatic Div., Rockwell Spring and Axle Co.,
Jackson, Mich.
Typhoon Air Conditioning Co., Div. of Hupp Corp. Brooklyn,
N. Y.
Union Asbestos & Rubber Co., Chicago, Ill.
United States Air Conditioning Corp., Minneapolis, Minn.
Utility Appliance Corp., Los Angeles, Calif.
Viking Mfg. Corp., Cleveland, O.
Waterman-Waterbury Co., Minneapolis, Minn.
Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.

Whitehall Engineering Co., Chicago, Ill.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co.,
 Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 York-Shipley, Inc., York, Pa.
 Young Radiator Co., Racine, Wis.

**UNITS, AIR CONDITIONING, CENTRAL PLANT,
 RESIDENTIAL, SUMMER ONLY, CONSISTING
 OF COOLING COIL, FILTER AND
 CONDENSING UNIT (WITHOUT BLOWER)**

For Connection to Existing Warm Air Heating System

Addison Products Co., Addison, Mich.
 Air Conditioning Engineering Co., Cambridge, Mass.
 Airtemp Div., Chrysler Corp., Dayton, O.
 Amana Refrigeration, Inc., Amana, Ia.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning
 Div., New York, N. Y.
 Armstrong Furnace Co., Columbus, O.
 Auburn Burner Co., Auburn, Ind.
 Bal-Air, Inc., Nashville, Tenn.
 Barkow Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
 Berger Furnace Corp., Belle Vernon, Pa.
 Besser Metal Products Corp., Charlotte, N. C.
 Blissfield Mfg. Co., Blissfield, Mich.
 Brunner Mfg. Co., Utica, N. Y.
 Carrier Corp., Syracuse, N.Y.
 Century Engineering Corp., Cedar Rapids, Ia.
 Coleman Co., Inc., Wichita, Kans.
 Columbia Specialty Co., Inc., Chevy Chase, Md.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Cool-Ette, Inc., Detroit, Mich.
 Crane Co., Chicago, Ill.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Deering Air Conditioning Co., Cincinnati, O.
 Delta Heating Corp., Trenton, N. J.
 Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 Forston Co., Houston, Tex.
 Friedrich Refrigerators, Inc., San Antonio, Tex.
 Frigidaire Div., General Motors Corp., Dayton, O.
 General Electric Co., Air Conditioning Div., Bloomfield, N.J.
 Gibson Refrigerator Co., Greenville, Mich.
 Green Colonial Furnace Co., Des Moines, Ia.
 Hastings Air Control, Inc., Omaha, Nebr.
 Heating Equipment Mfg. Co., San Francisco, Calif.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, O.
 Hupp Corp., Globe Stamping Div., Cleveland, O.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich.
 Iron Fireman Mfg. Co., Cleveland, O.
 International Sales Co., San Francisco, Calif.
 Lennox Industries, Inc., Marshalltown, O.
 Jettronaire, Inc., Pittsburgh, Pa.
 Lipman Refrigeration Div., Yates-American Machine Co., Be-
 loit, Wis.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Meyer Furnace Co., Peoria, Ill.
 Melchior, Armstrong, Dessau Co., Ridgefield, N. J.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Norman Products Co., Inc., Columbus, O.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Penguin Corp., Livonia, Mich.
 Primor Products, Inc., Adrian, Mich.
 Refrigeration Economics, Inc., Canton, O.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O.
 Sequoia Mfg. Co., San Carlos, Calif.
 Shana Mfg. Co., Chicago, Ill.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Sterling Air Conditioning Corp., Gastonia, N. C.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Sutton Corp., O. A., Wichita, Kans.
 Thatcher Furnace Co., Garwood, N. J.

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N.
 Y.
 Ultrasonic Corp., Cambridge, Mass.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Viking Mfg. Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co.,
 Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N.J.
 York Corp., York, Pa.
 York-Shipley, Inc., York, Pa.

**UNITS, AIR CONDITIONING, CENTRAL PLANT,
 RESIDENTIAL, SUMMER-WINTER**

Consisting of Blower, Filter, Humidifier, Direct Fired Warm Air
 Furnace, Cooling Coil and Condensing Unit for Duct Distribution
 of Air

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or
 oil)
 Airtemp Div., Chrysler Corp., Dayton, O. (Gas)
 American Furnace Co., St. Louis, Mo. (Gas)
 American Radiator & Standard Sanitary Corp., Air Conditioning
 Div., New York, N. Y. (Gas or oil)
 Armstrong Furnace Co., Columbus, O. (Gas or oil)
 Automatic Firing Corp., St. Louis, Mo. (Gas or oil)
 Bard Mfg. Co., Bryan, O. (Gas or oil)
 Berger Furnace Corp., Belle Vernon, Pa. (Gas)
 Besser Metal Products Corp., Charlotte, N. C. (Oil)
 Bonair Products, Inc., Darby, Pa.
 Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)
 Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)
 Clime-Matic Corp., South Norwalk, Conn. (Gas)
 Coleman Co., Inc., Wichita, Kans.
 Combustion Engineering, Inc., Chattanooga, Tenn. (Gas)
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Crane Co., Chicago, Ill. (Gas or oil)
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 (Gas or oil)
 Delta Heating Corp., Trenton, N. J. (Gas or oil)
 Dualtron Co., Pittsburgh, Pa. (Gas or oil)
 Farquhar Furnace Co., Wilmington, O. (Gas or oil)
 Frigidaire Div., General Motors Corp., Dayton, O. (Gas or oil)
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 (Gas or oil)
 Heating Equipment Mfg. Co., San Francisco, Calif. (Gas)
 Henry Furnace Co., Medina, O. (Gas or oil)
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich. (Gas or oil)
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif. (Gas)
 Lennox Industries, Inc., Marshalltown, Ia. (Gas)
 Majestic Co., Inc., Huntington, Ind. (Gas or oil)
 Mayflower Air Conditioners, Inc., St. Paul, Minn. (Oil or gas)
 Meyer Furnace Co., Peoria, Ill. (Oil or gas)
 Mitchell Mfg. Co., Chicago, Ill. (Gas)
 Mueller Climatrol, Milwaukee, Wis. (Gas or oil)
 National-U. S. Radiator Corp., Johnstown, Pa. (Gas or oil)
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace & Foundry Co., Indianapolis, Ind. (Gas or oil)
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O. (Gas or oil)
 Sequoia Mfg. Co., San Carlos, Calif. (Gas)
 Shana Mfg., Inc., Chicago, Ill. (Gas or oil)
 Skinner Heating & Ventilating Co., Div. St. Louis Blow Pipe
 & Heater Co., Inc., St. Louis, Mo. (Gas or oil)
 Sterling Air Conditioning Corp., Gastonia, N. C. (Gas or oil)
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill. (Gas or oil)
 Southwest Mfg. Co., Aurora, Mo. (Gas)
 Superior Furnace & Mfg. Co., Plymouth, Mich. (Gas or oil)
 Surface Combustion Corp., Toledo, O.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co.,
 Jackson, Mich. (Gas)
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn,
 N. Y. (Gas)
 United States Air Conditioning Co., Minneapolis, Minn. (Gas)
 Utility Appliance Corp., Los Angeles, Calif. (Gas)
 Waterman-Waterbury Co., Minneapolis, Minn. (Gas or oil)

Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va. (Gas or oil)
 Williamson Co., The, Cincinnati, O. (Gas or oil)
 Worthington Corp., Harrison, N. J. (Gas or oil)
 York Corp., York, Pa. (Gas or oil)

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, FOR REMOTE CONDENSING UNIT OR COLD WATER SUPPLY

Consisting of Blower, Filter, Humidifier, Direct Fired Warm Air Furnace and Cooling Coil for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or oil)
 Airtemp Div., Chrysler Corp., Dayton, O. (Oil)
 American Radiator and Standard Sanitary Corp., Air Conditioning Div., New York, N. Y. (Gas or oil)
 Bard Mfg. Co., Bryan, O. (Gas or oil)
 Berger Furnace Corp., Belle Vernon, Pa. (Gas)
 Besser Metal Products Corp., Charlotte, N. C. (Oil)
 Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)
 Carrier Corp., Syracuse, N. Y. (Gas or oil)
 Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)
 Coleman Co., Inc., Wichita, Kans.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)
 Fraser & Johnston Co., San Francisco, Calif. (Gas)
 Henry Furnace Co., Medina, O. (Gas or oil)
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Meyer Furnace Co., Peoria, Ill. (Gas or oil)
 Mueller Climatrol, Milwaukee, Wis. (Gas or oil)
 Olsen Mfg. Co., The C. A., Elyria, O. (Gas or oil)
 Patten Co., J. V., Sycamore, Ill. (Gas or oil)
 Peerless Furnace and Foundry Co., Indianapolis, Ind. (Oil or gas)
 Rheem Mfg. Co., Chicago, Ill. (Gas or oil)
 Round Oak Co., Inc., Dowagiac, Mich. (Oil or gas)
 Rybolt Heater Co., Ashland, O. (Gas or oil)
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill. (Gas or oil)
 Superior Furnace & Mfg. Co., Plymouth, Mich. (Gas or oil)
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y. (Gas)
 Union Asbestos & Rubber Co., Chicago, Ill.
 Williamson Co., The, Cincinnati, O. (Gas, oil, coal)
 Worthington Corp., Harrison, N. J. (Gas or oil)
 York Corp., York, Pa.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, WITH HEAT PUMP

Consisting of Blower, Filter, Humidifier, Reverse Refrigeration Cycle, Heating Coil and Cooling Coil for Duct Distribution of Air

Acme Industries, Inc., Jackson, Mich.
 Air Products, St. Louis, Mo.
 American Coils Co., Inc., Newark, N. J.
 General Electric Co., Air Cond. Div., Bloomfield, N. J.
 McMillan & Co., W. W., Jacksonville, Fla.
 Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.
 York Corp., York, Pa.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, WITH STEAM GENERATOR

Consisting of Blower, Filter, Humidifier, Heating Coil and Cooling Coil for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or oil)
 Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Servel, Inc., Evansville, Ind. (Gas)
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER ONLY, HORIZONTALLY MOUNTED

Consisting of Blower, Filter, Cooling Coil and Condensing Unit for Duct Distribution of Air

Addison Products Co., Addison, Mich.
 Airtron Corp., Holland, O.
 Amana Refrigeration, Inc., Amana, Ia.
 American Radiator and Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.

Armstrong Furnace Co., Columbus, O.
 Brucker, Inc., M., Chicago, Ill.

Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Century Engineering Corp., Cedar Rapids, Ia.
 Coleman Co., Inc., Wichita, Kans. (Gas)
 Continental Mfg. Co., Phoenix, Ariz.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Dowagiac Steel Furnace Co., Dowagiac, Mich.
 Electromode Div. of Commercial Controls, Rochester, N. Y.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 Great Northern Mfg. Corp., Chicago, Ill.
 Harvey-Hill, Inc., St. Louis, Mo.
 Lennox Industries, Inc., Marshalltown, Ia.
 Mueller Climatrol, Milwaukee, Wis.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Primor Products, Inc., Adrian, Mich.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O.
 Shana Mfg. Inc., Chicago, Ill.
 Sheet Metal Mfg. Co., Youngstown, O.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Southwest Mfg. Co., Aurora, Mo.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Surface Combustion Corp., Toledo, O.
 Sutton Corp., O. A., Wichita, Kans.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Ultrasonic Corp., Cambridge, Mass.
 Viking Mfg. Corp., Cleveland, O.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N. J.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER HORIZONTALLY MOUNTED

Consisting of Blower, Filter, Direct Fired, Warm Air Furnace, Cooling Coil and Condensing Unit for Duct Distribution of Air

Armstrong Furnace Co., Columbus, O. (Gas or oil)
 Besser Metal Products Corp., Charlotte, N. C. (Oil)
 Bryant Div. of Carrier Corp., Indianapolis, Ind.
 Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)
 Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Fraser & Johnston Co., San Francisco, Calif. (Gas)
 General Electric Co., Air Conditioning Div., Bloomfield, N. J. (Gas or oil)
 Heil Co., Milwaukee, Wis. (Gas or oil)
 Henry Furnace Co., Medina, O. (Gas or oil)
 Marvair Div., Muncie Gear Works, Inc., Muncie, Ind.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Olsen Mfg. Co., The C. A., Elyria, O. (Gas or oil)
 Peerless Furnace and Foundry Co., Indianapolis, Ind. (Gas or oil)
 Rheem Mfg. Co., Chicago, Ill. (Gas)
 Round Oak Co., Inc., Dowagiac, Mich.
 Sequoia Mfg. Co., San Carlos, Calif. (Gas)
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Westinghouse Electric Corp., Electric Appliance Div., Springfield, Mass.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, WINTER ONLY, CONSISTING OF FURNACE, BLOWER, FILTER AND HUMIDIFIER

See furnaces, forced warm air

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, WINTER ONLY, FOR SPLIT SYSTEM

Consisting of Blower, Filter, Humidifier, Heating Coil and Connection to Remote Steam or Hot Water Boiler for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.
 Airtemp Div., Chrysler Corp., Dayton, Ohio
 Buffalo Forge Co., Buffalo, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Clarage Fan Co., Kalamazoo, Mich.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Johnson Co., S. T., Oakland, Calif., and Philadelphia, Pa.
 Kennard Corp., St. Louis, Mo.

Whitehall Engineering Co., Chicago, Ill.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co.,
 Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 York-Shipley, Inc., York, Pa.
 Young Radiator Co., Racine, Wis.

**UNITS, AIR CONDITIONING, CENTRAL PLANT,
 RESIDENTIAL, SUMMER ONLY, CONSISTING
 OF COOLING COIL, FILTER AND
 CONDENSING UNIT (WITHOUT BLOWER)**

For Connection to Existing Warm Air Heating System

Addison Products Co., Addison, Mich.
 Air Conditioning Engineering Co., Cambridge, Mass.
 Airtemp Div., Chrysler Corp., Dayton, O.
 Amana Refrigeration, Inc., Amana, Ia.
 American Furnace Co., St. Louis, Mo.
 American Radiator & Standard Sanitary Corp., Air Conditioning
 Div., New York, N. Y.
 Armstrong Furnace Co., Columbus, O.
 Auburn Burner Co., Auburn, Ind.
 Bal-Air, Inc., Nashville, Tenn.
 Barkow Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
 Berger Furnace Corp., Belle Vernon, Pa.
 Besser Metal Products Corp., Charlotte, N. C.
 Blissfield Mfg. Co., Blissfield, Mich.
 Brunner Mfg. Co., Utica, N. Y.
 Carrier Corp., Syracuse, N.Y.
 Century Engineering Corp., Cedar Rapids, Ia.
 Coleman Co., Inc., Wichita, Kans.
 Columbia Specialty Co., Inc., Chevy Chase, Md.
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Cool-Ette, Inc., Detroit, Mich.
 Crane Co., Chicago, Ill.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Day & Night Div., Carrier Corp., Monrovia, Calif.
 Deering Air Conditioning Co., Cincinnati, O.
 Delta Heating Corp., Trenton, N. J.
 Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
 Forest City Foundries Co., Niagara Furnace Div., Cleveland, O.
 Forston Co., Houston, Tex.
 Friedrich Refrigerators, Inc., San Antonio, Tex.
 Frigidaire Div., General Motors Corp., Dayton, O.
 General Electric Co., Air Conditioning Div., Bloomfield, N.J.
 Gibson Refrigerator Co., Greenville, Mich.
 Green Colonial Furnace Co., Des Moines, Ia.
 Hastings Air Control, Inc., Omaha, Nebr.
 Heating Equipment Mfg. Co., San Francisco, Calif.
 Heil Co., Milwaukee, Wis.
 Henry Furnace Co., Medina, O.
 Hupp Corp., Globe Stamping Div., Cleveland, O.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich.
 Iron Fireman Mfg. Co., Cleveland, O.
 International Sales Co., San Francisco, Calif.
 Lennox Industries, Inc., Marshalltown, O.
 Jettronaire, Inc., Pittsburgh, Pa.
 Lipman Refrigeration Div., Yates-American Machine Co., Be-
 loit, Wis.
 McDonald Mfg. Co., A. Y., Dubuque, Ia.
 Meyer Furnace Co., Peoria, Ill.
 Melchior, Armstrong, Dessau Co., Ridgefield, N. J.
 Mueller Climatrol, Milwaukee, Wis.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Norman Products Co., Inc., Columbus, O.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Payne Div. of Carrier Corp., Monrovia, Calif.
 Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Penguin Corp., Livonia, Mich.
 Primor Products, Inc., Adrian, Mich.
 Refrigeration Economics, Inc., Canton, O.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O.
 Sequoia Mfg. Co., San Carlos, Calif.
 Shana Mfg. Co., Chicago, Ill.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Sterling Air Conditioning Corp., Gastonia, N. C.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Sutton Corp., O. A., Wichita, Kans.
 Thatcher Furnace Co., Garwood, N. J.

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N.
 Y.
 Ultrasonic Corp., Cambridge, Mass.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Viking Mfg. Corp., Cleveland, O.
 Waterman-Waterbury Co., Minneapolis, Minn.
 Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co.,
 Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N.J.
 York Corp., York, Pa.
 York-Shipley, Inc., York, Pa.

**UNITS, AIR CONDITIONING, CENTRAL PLANT,
 RESIDENTIAL, SUMMER-WINTER**

**Consisting of Blower, Filter, Humidifier, Direct Fired Warm Air
 Furnace, Cooling Coil and Condensing Unit for Duct Distribution
 of Air**

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or
 oil)
 Airtemp Div., Chrysler Corp., Dayton, O. (Gas)
 American Furnace Co., St. Louis, Mo. (Gas)
 American Radiator & Standard Sanitary Corp., Air Conditioning
 Div., New York, N. Y. (Gas or oil)
 Armstrong Furnace Co., Columbus, O. (Gas or oil)
 Automatic Firing Corp., St. Louis, Mo. (Gas or oil)
 Bard Mfg. Co., Bryan, O. (Gas or oil)
 Berger Furnace Corp., Belle Vernon, Pa. (Gas)
 Besser Metal Products Corp., Charlotte, N. C. (Oil)
 Bonair Products, Inc., Darby, Pa.
 Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)
 Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)
 Clime-Matic Corp., South Norwalk, Conn. (Gas)
 Coleman Co., Inc., Wichita, Kans.
 Combustion Engineering, Inc., Chattanooga, Tenn. (Gas)
 Conco Engineering Works, Heating Div., Mendota, Ill.
 Crane Co., Chicago, Ill. (Gas or oil)
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)
 Delco Appliance Div., General Motors Corp., Rochester, N. Y.
 (Gas or oil)
 Delta Heating Corp., Trenton, N. J. (Gas or oil)
 Dualtron Co., Pittsburgh, Pa. (Gas or oil)
 Farquhar Furnace Co., Wilmington, O. (Gas or oil)
 Frigidaire Div., General Motors Corp., Dayton, O. (Gas or oil)
 General Automatic Products Corp., Baltimore, Md.
 General Electric Co., Air Conditioning Div., Bloomfield, N. J.
 (Gas or oil)
 Heating Equipment Mfg. Co., San Francisco, Calif. (Gas)
 Henry Furnace Co., Medina, O. (Gas or oil)
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo,
 Mich. (Gas or oil)
 International Oil Burner Co., St. Louis, Mo.
 International Sales Co., San Francisco, Calif. (Gas)
 Lennox Industries, Inc., Marshalltown, Ia. (Gas)
 Majestic Co., Inc., Huntington, Ind. (Gas or oil)
 Mayflower Air Conditioners, Inc., St. Paul, Minn. (Oil or gas)
 Meyer Furnace Co., Peoria, Ill. (Oil or gas)
 Mitchell Mfg. Co., Chicago, Ill. (Gas)
 Mueller Climatrol, Milwaukee, Wis. (Gas or oil)
 National-U. S. Radiator Corp., Johnstown, Pa. (Gas or oil)
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Peerless Furnace & Foundry Co., Indianapolis, Ind. (Gas or oil)
 Ralph Mfg. Co., Inc., Wadsworth, O.
 Rheem Mfg. Co., Chicago, Ill.
 Round Oak Co., Inc., Dowagiac, Mich.
 Rybolt Heater Co., Ashland, O. (Gas or oil)
 Sequoia Mfg. Co., San Carlos, Calif. (Gas)
 Shana Mfg., Inc., Chicago, Ill. (Gas or oil)
 Skinner Heating & Ventilating Co., Div. St. Louis Blow Pipe
 & Heater Co., Inc., St. Louis, Mo. (Gas or oil)
 Sterling Air Conditioning Corp., Gastonia, N. C. (Gas or oil)
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill. (Gas or oil)
 Southwest Mfg. Co., Aurora, Mo. (Gas)
 Superior Furnace & Mfg. Co., Plymouth, Mich. (Gas or oil)
 Surface Combustion Corp., Toledo, O.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co.,
 Jackson, Mich. (Gas)
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn,
 N. Y. (Gas)
 United States Air Conditioning Co., Minneapolis, Minn. (Gas)
 Utility Appliance Corp., Los Angeles, Calif. (Gas)
 Waterman-Waterbury Co., Minneapolis, Minn. (Gas or oil)

Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va. (Gas or oil)
 Williamson Co., The, Cincinnati, O. (Gas or oil)
 Worthington Corp., Harrison, N. J. (Gas or oil)
 York Corp., York, Pa. (Gas or oil)

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, FOR REMOTE CONDENSING UNIT OR COLD WATER SUPPLY

Consisting of Blower, Filter, Humidifier, Direct Fired Warm Air Furnace and Cooling Coil for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or oil)

Airtemp Div., Chrysler Corp., Dayton, O. (Oil)
 American Radiator and Standard Sanitary Corp., Air Conditioning Div., New York, N. Y. (Gas or oil)

Bard Mfg. Co., Bryan, O. (Gas or oil)

Berger Furnace Corp., Belle Vernon, Pa. (Gas)

Besser Metal Products Corp., Charlotte, N. C. (Oil)

Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)

Carrier Corp., Syracuse, N. Y. (Gas or oil)

Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)

Coleman Co., Inc., Wichita, Kans.

Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.

Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)

Fraser & Johnston Co., San Francisco, Calif. (Gas)

Henry Furnace Co., Medina, O. (Gas or oil)

Illinois Iron & Bolt Co., Carpentersville, Ill.

Meyer Furnace Co., Peoria, Ill. (Gas or oil)

Mueller Climatrol, Milwaukee, Wis. (Gas or oil)

Olsen Mfg. Co., The C. A., Elyria, O. (Gas or oil)

Patten Co., J. V., Sycamore, Ill. (Gas or oil)

Peerless Furnace and Foundry Co., Indianapolis, Ind. (Oil or gas)

Rheem Mfg. Co., Chicago, Ill. (Gas or oil)

Round Oak Co., Inc., Dowagiac, Mich. (Oil or gas)

Rybolt Heater Co., Ashland, O. (Gas or oil)

Smith Corp., A. O., Permaglas Div., Kankakee, Ill. (Gas or oil)

Superior Furnace & Mfg. Co., Plymouth, Mich. (Gas or oil)

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y. (Gas)

Union Asbestos & Rubber Co., Chicago, Ill.

Williamson Co., The, Cincinnati, O. (Gas, oil, coal)

Worthington Corp., Harrison, N. J. (Gas or oil)

York Corp., York, Pa.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, WITH HEAT PUMP

Consisting of Blower, Filter, Humidifier, Reverse Refrigeration Cycle, Heating Coil and Cooling Coil for Duct Distribution of Air

Acme Industries, Inc., Jackson, Mich.

Air Products, St. Louis, Mo.

American Coils Co., Inc., Newark, N. J.

General Electric Co., Air Cond. Div., Bloomfield, N. J.

McMillan & Co., W. W., Jacksonville, Fla.

Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.

Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.

York Corp., York, Pa.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER, WITH STEAM GENERATOR

Consisting of Blower, Filter, Humidifier, Heating Coil and Cooling Coil for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass. (Gas or oil)

Bryant Div. of Carrier Corp., Indianapolis, Ind. (Gas or oil)

Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.

Servel, Inc., Evansville, Ind. (Gas)

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.

York Corp., York, Pa.

Young Radiator Co., Racine, Wis.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER ONLY, HORIZONTALLY MOUNTED

Consisting of Blower, Filter, Cooling Coil and Condensing Unit for Duct Distribution of Air

Addison Products Co., Addison, Mich.

Airtron Corp., Holland, O.

Amana Refrigeration, Inc., Amana, Ia.

American Radiator and Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.

Armstrong Furnace Co., Columbus, O.

Brucker, Inc., M., Chicago, Ill.

Bryant Div. of Carrier Corp., Indianapolis, Ind.

Century Engineering Corp., Cedar Rapids, Ia.

Coleman Co., Inc., Wichita, Kans. (Gas)

Continental Mfg. Co., Phoenix, Ariz.

Day & Night Div., Carrier Corp., Monrovia, Calif.

Dowagiac Steel Furnace Co., Dowagiac, Mich.

Electromode Div. of Commercial Controls, Rochester, N. Y.

General Electric Co., Air Conditioning Div., Bloomfield, N. J.

Great Northern Mfg. Corp., Chicago, Ill.

Harvey-Hill, Inc., St. Louis, Mo.

Lennox Industries, Inc., Marshalltown, Ia.

Mueller Climatrol, Milwaukee, Wis.

Payne Div. of Carrier Corp., Monrovia, Calif.

Peerless Furnace and Foundry Co., Indianapolis, Ind.

Primor Products, Inc., Adrian, Mich.

Rheem Mfg. Co., Chicago, Ill.

Round Oak Co., Inc., Dowagiac, Mich.

Rybolt Heater Co., Ashland, O.

Shana Mfg. Inc., Chicago, Ill.

Sheet Metal Mfg. Co., Youngstown, O.

Smith Corp., A. O., Permaglas Div., Kankakee, Ill.

Southwest Mfg. Co., Aurora, Mo.

Superior Furnace & Mfg. Co., Plymouth, Mich.

Surface Combustion Corp., Toledo, O.

Sutton Corp., O. A., Wichita, Kans.

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.

Ultrasonic Corp., Cambridge, Mass.

Viking Mfg. Corp., Cleveland, O.

Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.

Williamson Co., The, Cincinnati, O.

Worthington Corp., Harrison, N. J.

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, SUMMER-WINTER HORIZONTALLY MOUNTED

Consisting of Blower, Filter, Direct Fired, Warm Air Furnace, Cooling Coil and Condensing Unit for Duct Distribution of Air

Armstrong Furnace Co., Columbus, O. (Gas or oil)

Besser Metal Products Corp., Charlotte, N. C. (Oil)

Bryant Div. of Carrier Corp., Indianapolis, Ind.

Century Engineering Corp., Cedar Rapids, Ia. (Gas or oil)

Day & Night Div., Carrier Corp., Monrovia, Calif. (Gas)

Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.

Fraser & Johnston Co., San Francisco, Calif. (Gas)

General Electric Co., Air Conditioning Div., Bloomfield, N. J. (Gas or oil)

Heil Co., Milwaukee, Wis. (Gas or oil)

Henry Furnace Co., Medina, O. (Gas or oil)

Marvair Div., Muncie Gear Works, Inc., Muncie, Ind.

National-U. S. Radiator Corp., Johnstown, Pa.

Olsen Mfg. Co., The C. A., Elyria, O. (Gas or oil)

Peerless Furnace and Foundry Co., Indianapolis, Ind. (Gas or oil)

Rheem Mfg. Co., Chicago, Ill. (Gas)

Round Oak Co., Inc., Dowagiac, Mich.

Sequoia Mfg. Co., San Carlos, Calif. (Gas)

Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.

Westinghouse Electric Corp., Electric Appliance Div., Springfield, Mass.

Williamson Co., The, Cincinnati, O. (Gas, oil, coal)

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, WINTER ONLY, CONSISTING OF FURNACE, BLOWER, FILTER AND HUMIDIFIER

See furnaces, forced warm air

UNITS, AIR CONDITIONING, CENTRAL PLANT, RESIDENTIAL, WINTER ONLY, FOR SPLIT SYSTEM

Consisting of Blower, Filter, Humidifier, Heating Coil and Connection to Remote Steam or Hot Water Boiler for Duct Distribution of Air

Air Conditioning Engineering Co., Cambridge, Mass.

Airtemp Div., Chrysler Corp., Dayton, Ohio

Buffalo Forge Co., Buffalo, N. Y.

Bush Mfg. Co., West Hartford, Conn.

Clarage Fan Co., Kalamazoo, Mich.

Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.

Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.

Hastings Air Conditioning Co., Inc., Hastings, Nebr.

Johnson Co., S. T., Oakland, Calif., and Philadelphia, Pa.

Kennard Corp., St. Louis, Mo.

Marlo Coil Co., St. Louis, Mo.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Western Blower Co., Seattle, Wash.
 Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.

UNITS, AIR CONDITIONING, CENTRAL SYSTEM, EVAPORATIVE TYPE

For Duct Distribution of Air, Consisting of Blower, Filter, Pump, and Sprays or Mats (for cooling by evaporation)

Air & Refrigeration Corp., New York, N. Y.
 Alton Mfg. Co., Dallas, Tex.
 Barwick Mfg. Corp., Wichita, Kans.
 Dry & Sons, J. R., Abilene, Tex.
 Essick Mfg. Co., Los Angeles, Calif.
 Hayes Furnace Mfg. & Supply Co., Los Angeles, Calif.
 Heating Assurance, Inc., Spokane, Wash.
 International Metal Products Co., Phoenix, Ariz.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Mountain States Equipment Co., Denver, Colo.
 National Engineering & Mfg. Co., Sedalia, Mo.
 Palmer Mfg. Corp., Phoenix, Ariz.
 Southwest Mfg. Co., Aurora, Mo.
 Wright Mfg. Co., Phoenix, Ariz.

UNITS, AIR CONDITIONING, REMOTE

See Coils, Cooling, Direct Expansion; Condensing Units, Refrigerating

UNITS, AIR CONDITIONING, ROOM TYPE, EVAPORATIVE

Consisting of Blower, Filter, Pump, and Sprays or Mats (for cooling by evaporation)

Air Cooling Engineering Co., Evanston, Ill.
 Airfan Engineering Co., Los Angeles, Calif.
 Alton Mfg. Co., Dallas, Texas.
 American Cooling Tower Co., Kansas City, Mo.
 Arizona Maintenance Co., Tucson, Ariz.
 Auburn Foundry, Inc., Stoker Div., Auburn, Ind.
 Barwick Mfg. Corp., Wichita, Kans.
 Belmetals Mfg. Co., Inc., Belmont, Calif.
 Brown, Gene, San Antonio, Tex.
 Central States Mfg. Co., Inc., Arkansas City, Kans.
 Comfort Products Corp., Dallas, Texas.
 Dearborn Stove Co., Dallas, Texas.
 Dry & Sons, J. R., Abilene, Tex.
 Essick Mfg. Co., Los Angeles, Calif.
 Farr Co., Los Angeles, Calif.
 Heating Assurance, Inc., Spokane, Wash.
 International Metal Products Co., Phoenix, Ariz.
 Kleer-Kleen Mfg. Co., Hayward, Calif.
 Lennox Industries, Inc., Marshalltown, Ia.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Magic Aire Div., United Electric Co., Wichita Falls, Tex.
 Morey, Dan, Los Angeles, Calif.
 Mountain States Equipment Co., Denver, Colo.
 National Engineering & Mfg. Co., Sedalia, Mo.
 National Gas Equipment Co., Inc., Denison, Tex.
 Norris-Thermador Corp., Los Angeles, Calif.
 Palmer Mfg. Corp., Phoenix, Ariz.
 Pernot Corp., Norwalk, Calif.
 Pioneer Furnace Co., Los Angeles, Calif.
 Reynolds Mfg. Co., Springfield, Mo.
 Southwest Mfg. Co., Aurora, Mo.
 Thompson Mfg. Co., A. F., Huntington, W. Va.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 Utility Appliance Corp., Los Angeles, Calif.
 Wright Mfg. Co., Phoenix, Ariz.
 Zink Co., John, Tulsa, Okla.

UNITS, AIR CONDITIONING, ROOM TYPE, FLOOR CABINET, SUMMER ONLY

Consisting of Blower, Filter, Cooling Coil and Condensing Unit

Bal-Air, Inc., Nashville, Tenn.
 Baltimore Porcelain Steel Corp., Baltimore, Md.
 Barkow-Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
 Burnham Corp., Irvington, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Continental Mfg. Co., Phoenix, Ariz.
 Fedders-Quigan Corp., Buffalo, N. Y.

Henry Furnace Co., Medina, O.
 Hotpoint, Inc., Chicago, Ill.
 Kauffman Air Conditioning Corp., St. Louis, Mo.
 Made-Rite Co., Inc., Newport, Ky.
 Mueller Climatrol, Milwaukee, Wis.
 Olsen Mfg. Co., The C. A., Elyria, O.
 Patten Co., J. V., Sycamore, Ill.
 Remington Air Conditioning Div., Remington Corp., Auburn, N.Y.
 Round Oak Co., Inc., Dowagiac, Mich.
 Shana Mfg., Inc., Chicago, Ill.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Union Asbestos & Rubber Co., Chicago, Ill.

UNITS, AIR CONDITIONING, ROOM TYPE, FLOOR CABINET, SUMMER ONLY, FOR REMOTE CONDENSING UNIT OR COLD WATER SUPPLY

Consisting of Blower, Filter and Cooling Coil

Bal-Air, Inc., Nashville, Tenn.
 Buffalo Forge Co., Buffalo, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Carrier Corp., Syracuse, N. Y.
 Continental Mfg. Co., Phoenix, Ariz.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Henry Furnace Co., Medina, O.
 International Mfg. Co., Oklahoma City, Okla.
 Kennard Corp., St. Louis, Mo.
 Marlo Coil Co., St. Louis, Mo.
 McQuay, Inc., Minneapolis, Minn.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Patten Co., J. V., Sycamore, Ill.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Shana Mfg. Inc., Chicago, Ill.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Worthington Corp., Harrison, N.J.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

UNITS, AIR CONDITIONING, ROOM TYPE, FLOOR CABINET, SUMMER-WINTER

Consisting of Blower, Filter, Humidifier, and Heating and Cooling Coils for Connection to Steam or Hot Water Supply and Remote Condensing Unit or Cold Water Supply

Acme Industries, Inc., Jackson, Mich.
 Air Conditioning Engineering Co., Cambridge, Mass.
 Bal-Air, Inc., Nashville, Tenn.
 Buffalo Forge Co., Buffalo, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 International Mfg. Co., Oklahoma City, Okla.
 Kennard Corp., St. Louis, Mo.
 Marlo Coil Co., St. Louis, Mo.
 McQuay, Inc., Minneapolis, Minn.
 Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
 Refrigeration Economics Co., Inc., Canton, Ohio.
 Trane Co., The, LaCrosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Worthington Corp., Harrison, N. J.
 York Corp., York, Pa.
 Young Radiator Co., Racine, Wis.

UNITS, AIR CONDITIONING, ROOM TYPE, FLOOR CABINET, WINTER ONLY

Consisting of Blower, Filter, Humidifier, and Heating Coil for Connection to Remote Boiler

Buffalo Forge Co., Buffalo, N. Y.
 Bush Mfg. Co., West Hartford, Conn.
 Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 Kennard Corp., St. Louis, Mo.
 Marlo Coil Co., St. Louis, Mo.
 National-U. S. Radiator Corp., Johnstown, Pa.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Worthington Corp., Harrison, N. J.
 Young Radiator Co., Racine, Wis.

UNITS, AIR CONDITIONING, ROOM TYPE, WINDOW, SUMMER ONLY

Consisting of Blower, Filter, Cooling Coil and Condensing Unit

AMIC Mfg. Corp., Long Island City, N. Y.
Addison Products Co., Addison, Mich.
Admiral Corp., Chicago, Ill.
Airtemp Div., Chrysler Corp., Dayton, Ohio
Amana Refrigeration, Inc., Amana, Ia.
Automatic Firing Corp., St. Louis, Mo.
Avco Mfg. Corp., Crosley and Bendix Home Appliances, Cincinnati, O.
Bard Mfg. Co., Bryan, O.
Blissfield Mfg. Co., Blissfield, Mich.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Burnham Corp., Irvington, N. Y.
Carrier Corp., Syracuse, N. Y.
Cauhorn Distributing Co., Detroit, Mich.
Coolerator Co., Duluth, Minn.
Cronstroms, Inc., Minneapolis, Minn.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Deepfreeze Appliance Div., Motor Products Corp., North Chicago, Ill.
Deering Air Conditioning Co., Cincinnati, Ohio
Emerson Electric Mfg. Co., St. Louis, Mo.
Fedders-Quigan Corp., Buffalo, N. Y.
Forston Co., Houston, Tex.
Fresh-Aire Co., Div. of Cory Corp., Chicago, Ill.
Friedrich Refrigerators, Inc., San Antonio, Tex.
Frigid, Inc., Brooklyn, N. Y.
Frigidaire Div., General Motors Corp., Dayton, Ohio
General Appliance Corp., Greenville, Mich.
General Electric Co., Major Appliance Div., Room Air Conditioner Dept., Louisville, Ky.
Gibson Refrigerator Co., Greenville, Mich.
Hotpoint Co., Chicago, Ill.
Hunter Fan & Ventilating Co., Memphis, Tenn.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
Kauffman Air Conditioning Corp., St. Louis, Mo.
Kelvinator Div., American Motors Corp., Detroit, Mich.
King Refrigerator Co., Glendale, N. Y.
Lewyt Air-Conditioner Corp., Brooklyn, N. Y.
Lipman Refrigeration Div., Yates-American Machine Co., Beloit, Wis.
Made-Rite Co., Inc., Newport, Ky.
Magic Aire Div., United Electric Co., Wichita Falls, Tex.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McGraw Electric Co., Lonergan Mfg. Div., Albion, Mich.
McQuay, Inc., Minneapolis, Minn.
Mitchell Mfg. Co., Chicago, Ill.
Mueller Climatrol, Milwaukee, Wis.
National Steel Construction Co., Inc., Logansport, Ind.
National-U. S. Radiator Corp., Johnstown, Pa.
Philco Corp., Philadelphia, Pa.
Quiet-Heat Mfg. Corp., Subsidiary of Emerson Radio and Phonograph Corp., Newark, N. J.
Radio Corp. of America, Camden, N. J.
Remington Air Cond. Div., Remington Corp., Auburn, N. Y.
Rheem Mfg. Co., Chicago, Ill.
Robbins & Myers, Inc., Springfield, O.
Serval, Inc., Evansville, Ind.
Sterling Air Conditioning Corp., Gastonia, N. C.
Sub-Zero Freezer Co., Inc., Madison, Wis.
Sutton Corp., O. A., Wichita, Kans.
United States Air Conditioning Corp., Minneapolis, Minn.
Universal Major Electric Appliances, Inc., Lima, O.
Victor Products Corp., Hagerstown, Md.
Viking Air Conditioning Div., National Radiator Co., Cleveland, O.
Viking Mfg. Corp., Cleveland, O.
Westinghouse Electric Corp., Electric Appliance Div., Springfield, Mass.
Whirlpool-Seeger Corp., St. Joseph, Mich.
Whitehall Engineering Co., Chicago, Ill.
York Corp., York, Pa.

UNITS, AIR CONDITIONING, ROOM TYPE, WINDOW, SUMMER-WINTER

Consisting of Blower, Filter, Cooling Coil, Condensing Unit and Heating Unit

Airtemp Div., Chrysler Corp., Dayton, O.
Amana Refrigeration, Inc., Amana, Ia.
Blissfield Mfg. Co., Blissfield, Mich.

Carrier Corp., Syracuse, N. Y.
Cronstroms, Inc., Minneapolis, Minn.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Deepfreeze Appliance Div., Motor Products Corp., North Chicago, Ill.
Fedders-Quigan Corp., Buffalo, N. Y.
General Electric Co., Major Appliance Div., Room Air Conditioner Dept., Louisville, Ky.
Great Northern Mfg. Corp., Chicago, Ill.
Hotpoint Co., Chicago, Ill.
Kelvinator Div., American Motors Corp., Detroit, Mich.
King Refrigerator Co., Glendale, N. Y.
Mitchell Mfg. Co., Chicago, Ill.
National Steel Construction Co., Inc., Logansport, Ind.
National-U. S. Radiator Corp., Johnstown, Pa.
Penguin Corp., Livonia, Mich.
Philco Corp., Philadelphia, Pa.
Quiet-Heat Mfg. Corp., Subsidiary of Emerson Radio and Phonograph Corp., Newark, N. J.
Radio Corp. of America, Camden, N. J.
Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.
Rheem Mfg. Co., Chicago, Ill.
Serval, Inc., Evansville, Ind.
Sutton Corp., O. A., Wichita, Kans.
United States Air Conditioning Corp., Minneapolis, Minn.
Viking Mfg. Corp., Cleveland, O.
Westinghouse Electric Corp., Electric Appliance Div., Springfield, Mass.
York Corp., York, Pa.

UNITS, AIR CONDITIONING, STORE TYPE, FLOOR CABINET, SUMMER ONLY

Consisting of Blower, Filter, Cooling Coil and Condensing Unit, with Air Discharge Approximately 6 ft Above Floor

Airtemp Div., Chrysler Corp., Dayton, Ohio.
Airtron Corp., Holland, O.
Alton Mfg. Co., Dallas, Tex.
American Blower Corp., Detroit, Mich.
American Coils Co., Newark, N. J.
American Radiator and Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.
Armstrong Furnace Co., Columbus, O.
Automatic Firing Corp., St. Louis, Mo.
Bal-Air, Inc., Nashville, Tenn.
Bard Mfg. Co., Bryan, Ohio.
Barkow Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
Bonair Products, Inc., Darby, Pa.
Brunner Mfg. Co., Utica, N. Y.
Bryant Div. of Carrier Corp., Indianapolis, Ind.
Carrier Corp., Syracuse, N. Y.
Clime-Matic Corp., South Norwalk, Conn.
Coleman Co., Inc., Wichita, Kans.
Continental Mfg. Co., Phoenix, Ariz.
Cool-Ette, Inc., Detroit, Mich.
Curtis Mfg. Co., Refrigeration Div., St. Louis, Mo.
Deering Air Conditioning Co., Cincinnati, O.
Friedrich Refrigerators, Inc., San Antonio, Tex.
Frigidaire Div., General Motors Corp., Dayton, Ohio.
General Electric Co., Air Conditioning Div., Bloomfield, N. J.
Gibson Refrigerator Co., Greenville, Mich.
Governair Corp., Oklahoma City, Okla.
Great Northern Mfg. Corp., Chicago, Ill.
Green Colonial Furnace Co., Des Moines, Ia.
Haertel Co., Walter, Minneapolis, Minn.
Hastings Air Conditioning Co., Inc., Hastings, Nebr.
Henry Furnace Co., Medina, O.
Hupp Corp., Globe Stamping Div., Cleveland, O.
Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
Kauffman Air Conditioning Corp., St. Louis, Mo.
Koch Refrigerators Inc., North Kansas City, Kans.
Lennox Industries, Inc., Marshalltown, Ia.
Lipman Refrigeration Div., Yates-American Machine Co., Beloit, Wis.
Majestic Co., Inc., Huntington, Ind.
Melchior, Armstrong, Dessau Co., Ridgefield, N. J.
Meyer Furnace Co., Peoria, Ill.
Midwest Automatic Control Co., Des Moines, Ia.
Mitchell Mfg. Co., Chicago, Ill.
Mueller Climatrol, Milwaukee, Wis.
National-U. S. Radiator Corp., Johnstown, Pa.
Olsen Mfg. Co., The C. A., Elyria, O.
Patten Co., J. V., Sycamore, Ill.
Peerless Furnace and Foundry Co., Indianapolis, Ind.
Philco Corp., Philadelphia, Pa.
Primor Products, Inc., Adrian, Mich.

Ralph Mfg. Co., Inc., Wadsworth, O.
 Rinehart, Inc., Richmond, Ind.
 Round Oak Co., Inc., Dowagiac, Mich.
 Serfel, Inc., Evansville, Ind.
 Sterling Air Conditioning Corp., Gastonia, N. C.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Superior Furnace & Mfg. Co., Plymouth, Mich.
 Surface Combustion Corp., Toledo, O.
 Sutton Corp., O. A., Wichita, Kans.
 Thatcher Furnace Co., Garwood, N. J.
 Trane Co., The, LaCrosse, Wis.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
 Union Asbestos & Rubber Co., Chicago, Ill.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Viking Mfg. Corp., Cleveland, Ohio.
 Westinghouse Elec. Corp., Air Conditioning Div., Staunton, Va.
 Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
 Williamson Co., The, Cincinnati, O.
 Worthington Corp., Harrison, N. J.
 York-Shipley, Inc., York, Pa.

UNITS, AIR CONDITIONING, STORE TYPE, SUSPENDED CABINET, SUMMER ONLY

Consisting of Blower, Filter, Cooling Coil and Condensing Unit

Air Conditioning Engineering Co., Cambridge, Mass.
 Airtemp Div., Chrysler Corp., Dayton, O.
 Bal-Air, Inc., Nashville, Tenn.
 Barkow Mfg. Co., Inc., Aug. G., Milwaukee, Wis.
 Besser Metal Products Corp., Charlotte, N. C.
 Carrier Corp., Syracuse, N. Y.
 Central States Mfg. Co., Inc., Arkansas City, Kans.
 Clime-Matic Corp., South Norwalk, Conn.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Los Angeles, Calif.
 General Air Conditioning Corp., Los Angeles, Calif.
 Harvey-Hill, Inc., St. Louis, Mo.
 Lennox Industries, Inc., Marshalltown, Ia.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Union Asbestos & Rubber Co., Chicago, Ill.

UNITS, ELECTRIC HEATING

See Panels, Heating Electric

USED SHEET METAL WORKING MACHINES

See Machinery, Sheet Metal, Rebuilt and Used

VACUUM CLEANERS FOR FURNACES

See Cleaners, Vacuum, Furnace

VALVES, GAS, AUTOMATIC SHUT OFF

A-P Controls Corp., Milwaukee, Wis.
 Anderson Brass Co., Detroit, Mich.
 Combustion Control Div., Electronics Corp. of America, Boston, Mass.
 Deutsch Co., Los Angeles, Calif.
 Eclipse Fuel Engineering Co., Rockford, Ill.
 General Controls Co., Glendale, Calif.
 Milwaukee Gas Specialty Co., Milwaukee, Wis.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Patrol Valve Co., Cleveland, O.
 Penn Controls, Inc., Goshen, Ind.
 Perfex Corp., Milwaukee, Wis.
 Reynolds Gas Regulator Co., Anderson, Ind.
 Thermac Co., Los Angeles, Calif.
 White-Rodgers Electric Co., St. Louis, Mo.

VALVES, GAS, MOTORIZED

Barber-Colman Co., Rockford, Ill.
 Combustion Control Div., Electronics Corp. of America, Boston, Mass.
 Eclipse Fuel Engineering Co., Rockford, Ill.
 General Controls Co., Glendale, Calif.
 Milwaukee Gas Specialty Co., Milwaukee, Wis.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

VALVES, GAS PRESSURE REGULATING

Black, Sivalls & Bryson, Inc., Kansas City, Mo.
 Bristol Co., Waterbury, Conn.
 Davis Regulator Co., Chicago, Ill.
 Defender Instrument & Regulator Co., St. Louis, Mo.
 Dockson Corp., Detroit, Mich.
 Eclipse Fuel Engineering Co., Rockford, Ill.

Fisher Governor Co., Marshalltown, Iowa.
 Foster Engineering Co., Union, N. J.
 Gas & Oil Industry Laboratories, Inc., Irvington, N. J.
 General Controls Co., Glendale, Calif.
 Harris Caloric Co., Cleveland, Ohio.
 Hubbell Corp., Mundelein, Ill.
 Major Controls Co., Corona, Calif.
 Maxitrol Co., Detroit, Mich.
 Mercoid Corp., Chicago, Ill.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Penn Controls, Inc., Goshen, Ind.
 Perfex Corp., Milwaukee, Wis.
 Reliance Regulator Div. American Meter Co., Inc., Alhambra, Calif.
 Reynolds Gas Regulator Co., Anderson, Ind.
 Rockwell Mfg. Co., Meter and Valve Div., Pittsburgh, Pa.
 Thermac Co., Los Angeles, Calif.
 Thompson Products, Cleveland, O.
 Weldit, Inc., Detroit, Mich.

VALVES, GAS, SAFETY PILOT

A-P Controls Corp., Milwaukee, Wis.
 General Controls Co., Glendale, Calif.
 Milwaukee Gas Specialty Co., Milwaukee, Wis.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Thermac Co., Los Angeles, Calif.
 White-Rodgers Electric Co., St. Louis, Mo.

VALVES, HUMIDIFIER, WATER LEVEL

Beckett & Co., Thomas, Dallas, Texas.
 Fisher Governor Co., Marshalltown, Iowa.
 Imperial Brass Mfg. Co., Chicago, Ill.
 Lincoln Brass Works, Detroit, Mich.
 McDonnell & Miller, Inc., Chicago, Ill.
 Maid-O'-Mist, Inc., Chicago, Ill.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Morey, Dan, Los Angeles, Calif.
 Reitman Mfg. Co., Oakland, Calif.
 Robert Mfg. Co., Los Angeles, Calif.
 Skuttle Mfg. Co., Milford, Mich.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.

VALVES, REFRIGERATION, EXPANSION, THERMOSTATIC

A-P Controls Corp., Milwaukee, Wis.
 Alco Valve Co., St. Louis, Mo.
 Frigidaire Div., General Motors Corp., Dayton, Ohio.
 General Controls Co., Glendale, Calif.
 Mayson Mfg. Co., Detroit, Mich.
 Sporlan Valve Co., St. Louis, Mo.
 Tenney Engineering, Inc., Union, N. J.
 Vilter Mfg. Co., Milwaukee, Wis.
 X L Refrigerating Co., Chicago, Ill.

VALVES, REFRIGERATION, WATER REGULATING, PRESSURE OR TEMPERATURE ACTUATED

A-P Controls Corp., Milwaukee, Wis.
 Alco Valve Co., St. Louis, Mo.
 Art Valve Co., Chicago, Ill.
 Bailey Co., Chas. M., San Francisco, Calif.
 Cash Co., A. W., Decatur, Ill.
 Foster Engineering Co., Union, N. J.
 Klipfel Mfg. Co., Hamilton, Ohio.
 Marsh Corp., Jas. P., Skokie, Ill.
 McDonnell & Miller, Inc., Chicago, Ill.
 Mayson Mfg. Co., Detroit, Mich.
 Mueller Brass Co., Port Huron, Mich.
 Sarco Co., Inc., New York, N. Y.

VALVES, SADDLE

See Fittings, Humidifier, Water Line

VALVES, SOLENOID

A-P Controls Corp., Milwaukee, Wis.
 Alco Valve Co., St. Louis, Mo.
 Atkomatic Valve Co., Indianapolis, Ind.
 Automatic Switch Co., Orange, N. J.
 Barber-Colman Co., Rockford, Ill.
 Barksdale Valves, Los Angeles, Calif.
 Combustion Control Div., Electronics Corp. of America, Boston, Mass.
 Cooper Co., Clark, Palmyra, N. J.
 Crise Controls Div., Acro Mfg. Co., Columbus, O.
 Cutler-Hammer, Inc., Milwaukee, Wis.
 Davis Regulator Co., Chicago, Ill.

Detroit Controls Corp., Detroit, Mich.
 Eclipse Fuel Engineering Co., Rockford, Ill.
 Erickson Specialty Co., Cohoes, N. Y.
 Frick Co., Waynesboro, Pa.
 General Controls Co., Glendale, Calif.
 Grove Regulator Co., Oakland, Calif.
 Guardian Electric Mfg. Co., Chicago, Ill.
 Hays Mfg. Co., Erie, Pa.
 Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
 Hubbell Corp., Mundelein, Ill.
 Hunt & Son, Inc., C. B., Salem, Ohio.
 Jackes-Evans Mfg. Co., St. Louis, Mo.
 Keckley Co., O. C., Skokie, Ill.
 Lammert & Mann Co., Chicago, Ill.
 Locke Regulator Co., Salem, Mass.
 McDonnell & Miller, Inc., Chicago, Ill.
 McQuay-Norris Mfg. Co., St. Louis, Mo.
 Mercoid Corp., Chicago, Ill.
 Marsh Corp., Jas. P., Skokie, Ill.
 Milwaukee Gas Specialty Co., Milwaukee, Wis.
 Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Penn Controls, Inc., Goshen, Ind.
 Perfex Corp., Milwaukee, Wis.
 R-S Products Corp., Philadelphia, Pa.
 Sarco Co., Inc., New York, N. Y.
 Sarcotherm Controls, Inc., New York, N. Y.
 Sciaky Bros., Inc., Chicago, Ill.
 Security Valves Corp., Glendale, Calif.
 Skinner Electric Valve Div., Skinner Chuck Co., New Britain, Conn.
 Sporlan Valve Co., St. Louis, Mo.
 Square D Co., Detroit, Mich.
 Square D Co., Industrial Controller Div., Milwaukee, Wis.
 Supreme Electric Products Corp., Rochester, N. Y.
 Vapor Heating Corp., Chicago, Ill.
 White-Rodgers Electric Co., St. Louis, Mo.

VANES, DUCT TURNING

Anemostat Corp. of America, New York, N. Y.
 Barber-Colman Co., Rockford, Ill.
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
 Elgen Mfg. Corp., Long Island City, N. Y.
 Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
 Titus Mfg., Corp., Waterloo, Iowa.
 Tuttle & Bailey, Inc., New Britain, Conn.

VAPOR BARRIERS

See Barriers, Vapor, Crawl Space

VENT CAPS

See Caps, Vent

VENTILATOR AND FILTER UNITS, WINDOW

Airgard Mfg. Co., Chicago, Ill.
 Air Net Appliance Corp., Chicago, Ill. (With electric heating element)
 Berns Mfg. Co., Chicago, Ill.
 Frigid, Inc., Brooklyn, N. Y.
 Ilg Electric Ventilating Co., Chicago, Ill.
 Muckle Mfg. Co., Owatonna, Minn.
 Norge Div., Borg-Warner Corp., Chicago, Ill.
 Reed Unit-Fans, Inc., New Orleans, La.
 Somers, Inc., H. J., Detroit, Mich.
 Unified Air Conditioner Co., Duluth, Minn.
 Utility Appliance Corp., Los Angeles, Calif.
 Ventrola Mfg. Co., Owosso, Mich.

VENTILATORS, ROOF, FAN

Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
 Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
 Aerovent Fan Co., Piqua, Ohio.
 Air Controls, Inc., Cleveland, Ohio.
 Airjet Ventilator Co., El Monte, Calif.
 Airoflo Engineering Co., North Hollywood, Calif.
 Aladdin Heating Corp., Oakland, Calif.
 Allen Cooler & Ventilator Inc., Rochester, Mich.
 American Blower Corp., Detroit, Mich.
 American Steel Band Co., Pittsburgh, Pa.
 Ammerman Co., C. L., Minneapolis, Minn.
 Arex Co., Chicago, Ill.
 Atmos Corp., Chicago, Ill.
 Bar-Brook Mfg. Co., Inc., Shreveport, La.
 Bertram Co., Harvey P., Cincinnati, Ohio.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Bishop Co., R. H., Champaign, Ill.

Breidert Co., G. C., San Fernando, Calif.
 Burt Mfg. Co., Akron, Ohio.
 Carnes Corp., Verona, Wis.
 Century Fan & Ventilator Co., Inc., Stamford, Conn.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 Chicago Blower Corp., Franklin Park, Ill.
 Clay Equipment Corp., Cedar Falls, Iowa.
 Cook Co., Loren, Berea, Ohio.
 Dana Fan & Blower Corp., Cincinnati, Ohio.
 Davidson Hyduty Roof Fan Co., Newton, Mass.
 DeBothezat Fans Div., American Machine & Metals, Inc.
 East Moline, Ill.
 Diehl Mfg. Co., Somerville, N. J.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Dual-Air Fan Co., Hampshire, Ill.
 Electrovent Fan & Mfg. Co., Chicago, Ill.
 Empire Ventilation Equipment Co., Long Island City, N. Y.
 Fingles Co., Baltimore, Md.
 Flex-Air Inc., Los Angeles, Calif.
 Gallaher Co., Omaha, Nebr.
 Gehri Co., Tacoma, Wash.
 General Blower Co., Morton Grove, Ill.
 Hartzell Propeller Fan Co., Div. Castle Hills Corp., Piqua, Ohio.
 Hayes Furnace Mfg. & Supply Co., Los Angeles, Calif.
 Hirschman-Pohle Co., Inc., LeRoy, N. Y.
 Ilg Electric Ventilating Co., Chicago, Ill.
 International Engineering, Inc., Dayton, Ohio.
 Iona Ventilator Co., Inc., Philadelphia, Pa.
 Iron Lung Ventilator Co., Cleveland, Ohio.
 Jenn Air Products Co., Indianapolis, Ind.
 Jordan & Co., Inc., Paul R., Indianapolis, Ind.
 Joy Mfg. Co., Pittsburgh, Pa.
 King Co., Owatonna, Minn.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Lumm Co., A. H., Toledo, Ohio.
 M & E Mfg. Co., Indianapolis, Ind.
 Martin Fan & Blower Co., Chicago, Ill.
 Mountain States Equipment Co., Denver, Ohio.
 Muckle Mfg. Co., Owatonna, Minn.
 New York Blower Co., Chicago, Ill.
 Octagon Ventilator Co., Chicago, Ill.
 Peerless Electric Co., Warren, Ohio.
 Penn Ventilator Co., Philadelphia, Pa.
 Pennsylvania Wire Glass Co., Philadelphia, Pa.
 Puhl & Hepper Mfg. Co., Inc., St. Louis, Mo.
 Robbins & Myers, Inc., Springfield, Ohio.
 Robertson Co., H. H., Pittsburgh, Pa. (Round-Rectangular)
 Sargent EnginAiring Co., Cleveland, O.
 Somers, Inc., H. J., Detroit, Mich.
 South Bend Air Products, Inc., South Bend, Ind.
 Swartwout Co., Cleveland, Ohio.
 Trade-Wind Motorfans, Inc., Rivera, Calif.
 Trane Co., The, LaCrosse, Wis.
 Truillo Fan Co., Harmony, Pa.
 Uno Ventilator Co., Malden, Mass.
 Utility Appliance Corp., Los Angeles, Calif.
 Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
 Van Noorden Co., E., Boston, Mass.
 Wasco Products, Inc., Cambridge, Mass.
 Waverly Heating Supply Co., Boston, Mass.
 Western Engineering & Mfg. Co., Venice, Calif.
 Wind-Way Fan & Ventilator Co., New Orleans, La.
 Wing Mfg. Co., L. J., Linden, N. J.

VENTILATORS, ROOF, GRAVITY

Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
 Air Control Products, Inc., Coopersville, Mich.
 Air Controls, Inc., Cleveland, O.
 Air Devices, Inc., New York, N. Y.
 Airjet Ventilator Co., El Monte, Calif.
 Allen Cooler & Ventilator Inc., Rochester, Mich.
 American Steel Band Co., Pittsburgh, Pa.
 Ammerman Co., C. L., Minneapolis, Minn.
 Appleton Supply Co., Inc., Appleton, Wis.
 Arex Co., Chicago, Ill.
 Berger Furnace Corp., Belle Vernon, Pa.
 Breidert Co., G. C., San Fernando, Calif.
 Burt Mfg. Co., Akron, Ohio
 Ceco Steel Products Corp., Chicago, Ill.
 Century Fan & Ventilator Co., Inc. Stamford, Conn.
 Clay Equipment Corp., Cedar Falls, Iowa.
 Damp-Vent Co., Bettendorf, Ia.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Donley Bros. Co., Cleveland, O.
 Empire Ventilation Equipment Co., Long Island City, N. Y.

Fingles Co., Baltimore, Md.
 Gallaher Co., Omaha, Nebr.
 Gehri Co., Tacoma, Wash.
 Greenheck Bros. Mfg. Co., Schofield, Wis.
 Hirschman-Pohle Co., Inc., LeRoy, N. Y.
 Inland Steel Products Co., Milwaukee, Wis.
 International Metal Products Co., Phoenix, Ariz.
 Iona Ventilator Co., Inc., Philadelphia, Pa.
 Jordan & Co., Inc., Paul R., Indianapolis, Ind.
 Klauer Mfg. Co., Dubuque, Iowa.
 LaCrosse Steel Roofing & Corrugating Co., LaCrosse, Wis.
 Leslie Welding Co., Inc., Chicago, Ill.
 Los Angeles Sheet Metal Mfg. Co., Inc., Los Angeles, Calif.
 Lumm Co., A. H., Toledo, Ohio.
 M & E Mfg. Co., Indianapolis, Ind.
 Marco Co., East Orange, N. J.
 Martin Fan & Blower Co., Chicago, Ill.
 Moeschl-Edwards Corrugating Co., Inc., Cincinnati, Ohio.
 Octagon Ventilator Co., Chicago, Ill.
 Penn Supply & Metal Corp., Philadelphia, Pa.
 Penn Ventilator Co., Philadelphia, Pa.
 Pennsylvania Wire Glass Co., Philadelphia, Pa.
 Perkinson, William J., Chicago, Ill.
 Plasteel Products Corp., Washington, Pa.
 Puhl & Hepper Mfg. Co., Inc., St. Louis, Mo.
 Ralph Mfg. Co., Inc., Wadsworth, Ohio.
 Riggin Metal Products, Inc., Kankakee, Ill.
 Robertson Co., H. H., Pittsburgh, Pa.
 Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
 Ryniker Steel Products Co., Billings, Mont.
 Sheet Metal Mfg. Co., Inc., Brooklyn, N. Y.
 Simpson Co., Oakland, Calif.
 Sioux Steel Co., Sioux Falls, S. D.
 Southbridge Roofing Co., Inc., Southbridge, Mass.
 Souther Iron Co., E. E., St. Louis, Mo.
 Standard Furnace Supply Co., Ltd., Omaha, Nebr.
 Swartwout Co., Cleveland, Ohio. (Fire valve)
 Thor Metal Products Co., Inc., Syracuse, N. Y.
 Tierney Rotor Ventilator Co., Minneapolis, Minn.
 Tiffin Art Metal Co., Tiffin, Ohio.
 Uno Ventilator Co., Malden, Mass.
 Vallas, Lionel, Chicago, Ill.
 Van Noorden Co., E., Boston, Mass.
 Walker Mfg. & Sales Corp., St. Joseph, Mo.
 Warner Ventilator Co., LaGrange, Ind.
 Waverly Heating Supply Co., Boston, Mass.
 Western Engineering & Mfg. Co., Venice, Calif.
 Willis Steel Corp., Galesburg, Ill.

VENTILATORS, VENTILATING SYSTEM

Air Control Products, Inc., Coopersville, Mich.
 Ammerman Co., C. L., Minneapolis, Minn.
 American Steel Band Co., Pittsburgh, Pa.
 Auer Register Co., Cleveland, Ohio.
 Berger Furnace Corp., Belle Vernon, Pa.
 Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
 DeBothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Elgo Shutter & Mfg. Co., Detroit, Mich.
 Hart & Cooley Mfg. Co., Holland, Mich.
 Ilg Electric Ventilating Co., Chicago, Ill.
 Inland Steel Products Co., Milwaukee, Wis.
 King Co., Owatonna, Minn.
 Kool Air Engineering Co., San Bernardino, Calif.
 Knowles Mushroom Ventilator Co., Upper Montclair, N. J.
 Lumm Co., A. H., Toledo, Ohio.
 Martin Fan & Blower Co., Chicago, Ill.
 Miller & Doing, Brooklyn, N. Y.
 Penn Ventilator Co., Philadelphia, Pa.
 Perkinson, William J., Chicago, Ill.
 Robbins & Myers, Inc., Springfield, Ohio.
 Tuttle & Bailey, Inc., New Britain, Conn.
 United States Register Co., Battle Creek, Mich.
 Wood Mfg. Co., A. R., Luverne, Minn.

VIBRATION ISOLATORS

See Bases and Pads

WASHERS, AIR, HEATING AND VENTILATING

Capacity 4,000 c.f.m. and up

Air & Refrigeration Corp., New York, N. Y.
 Alton Mfg. Co., Dallas, Texas.
 American Blower Corp., Detroit, Mich.
 Bayley Blower Co., Milwaukee, Wis.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.

Buffalo Forge Co., Buffalo, N. Y.
 Carrier Corp., Syracuse, N. Y.
 Clarage Fan Co., Kalamazoo, Mich.
 Columbus Heating & Ventilating Co., Columbus, Ohio.
 Comfort Products Corp., Dallas, Texas.
 Continental Air Filters, Inc., Louisville, Ky.
 Donaldson Power Ventilator Co., North Hollywood, Calif.
 Mountain States Equipment Co., Denver, Colo.
 Peters-Dalton, Inc., Detroit, Mich.
 Spray Engineering Co., Somerville, Mass.
 Western Blower Co., Seattle, Wash.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
 York Corp., York, Pa.

WASHERS, ELECTROSTATIC FILTER

See Reconditioners, Filter, Electrostatic

WATER HEATING COILS, FIRE POT

See Coils, Fire Pot, Domestic Hot Water

WATERPROOFING MATERIALS

Anti-moisture penetrating and rust preventive

Alloy Surfaces Co., Philadelphia, Pa.
 American Steel Band Co., Pittsburgh, Pa.
 Armstrong Cork Co., Lancaster, Pa.
 Atlas Mineral Products Co., Mertztown, Pa.
 Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
 Blue Ridge Talc Co., Henry, Va.
 Cabot, Inc., Samuel, Boston, Mass.
 Calbar Paint & Varnish Co., Philadelphia, Pa.
 Carey Mfg. Co., Philip, Cincinnati, Ohio.
 Carter Paint Co., Liberty, Ind.
 Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
 Chemical Coatings & Engineering Co., Edgemont, Pa.
 Flintkote Co., New York, N. Y.
 Glidden Co., Cleveland, Ohio.
 Hague & Co., Inc., Alfred, Brooklyn, N. Y.
 Horn Co., Inc., A. C., Long Island City, N. Y.
 Industrial Metal Protectives, Dayton, Ohio.
 Insul-Mastic Corp. of America, Summit, Ill.
 Johns-Manville, New York, N. Y.
 Koppers Co., Inc., Pittsburgh, Pa.
 Liquid Plastics Corp., Long Island, City, N. Y.
 Magic Chemical Co., Brockton, Mass. (Plastic)
 Metropolitan Refining Co., Inc., Long Island City, N. Y.
 Minnesota Mining & Mfg. Co., Adhesives & Coatings Div., Detroit, Mich.
 Nebel Mfg. Co., Cleveland, Ohio.
 North American Mogul Products Co., Cleveland, O.
 Pabco Products Inc., San Francisco, Calif.
 Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
 Products Research Co., Los Angeles, Calif.
 Reilly Tar & Chemical Corp., Indianapolis, Ind.
 Robertson Co., H. H., Pittsburgh, Pa.
 Ruberoid Co., New York, N. Y.
 Sonneborn Sons, Inc., L., New York, N. Y.
 Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc., Savannah, Ga.
 Speco, Inc., Cleveland, O.
 Tamm Industries Inc., Chicago, Ill.
 Truscon Laboratories, Detroit, Mich.
 Wasco Products, Inc., Cambridge, Mass.
 Whitlam Mfg. Co., J. C., Wadsworth, O.
 Wilbur & Williams Co., Brighton, Mass.
 X-Pando Corp., Long Island City, N. Y.

WELDERS, ARC

Air Reduction Sales Co., New York, N. Y. (ac and dc)
 Electric Arc, Inc., Newark, N. J. (ac and dc)
 Ergolyte Mfg. Co., Philadelphia, Pa.
 Eutectic Welding Alloys Corp., Flushing, N. Y. (ac)
 Expert Welding Machine Co., Detroit, Mich. (ac and dc)
 Fern, Ralph, Scranton, Pa. (ac)
 General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
 Hammett Electric Mfg. Co., Kansas City, Mo.
 Harnischfeger Corp., Milwaukee, Wis. (Ac & dc)
 Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
 Hobart Bros. Co., Troy, Ohio. (Ac & dc)
 Hollup Corp., Div. National Cylinder Gas Co., Chicago, Ill.
 Lee Co., K. O., Aberdeen, S. D. (ac)
 Lincoln Electric Co., Cleveland, Ohio.
 Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill. (ac and dc)
 Marquette Mfg. Co., Inc., Minneapolis, Minn. (ac and dc)
 Metal & Thermit Corp., New York, N. Y. (ac & dc)
 Mid-States Welder Mfg. Co., Chicago, Ill. (ac)
 Miller Electric Mfg. Co., Inc., Appleton, Wis. (ac & dc)

National Cylinder Gas Co., Chicago, Ill. (ac & dc)
 Nelson Specialty Welding Equipment Corp., San Leandro, Calif. (Stud welder)
 Nelson Stud Welding Div. Gregory Industries, Inc., Lorain, Ohio. (dc)
 Precision Welder Mfg. Co., Chicago, Ill.
 Sight Feed Generator Co., W. Alexandria, O.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill. (ac, dc)
 Smith Welding Equipment Corp., Minneapolis, Minn. (ac)
 Triad Products, Ltd., Chicago, Ill. (ac)
 Westinghouse Electric Corp., Pittsburgh, Pa. (ac & dc)
 Will-Weld Mfg. Co., Inc., Omaha, Nebr. (ac)

WELDERS, PLASTIC MATERIALS

See Guns, Plastic Welding

WELDERS, PROJECTION

Acme Electric Welder Co., Los Angeles, Calif.
 Acro Welder Mfg. Co., Milwaukee, Wis.
 Eisler Engineering Co., Newark, N. J.
 Expert Welding Machine Co., Detroit, Mich.
 National Electric Welding Machines Co., Bay City, Mich.
 Peer, Inc., Benton Harbor, Mich.
 Progressive Welder Sales Co., Detroit, Mich.
 Rex Welder Co., Kansas City, Mo.
 Sciaky Bros., Inc., Chicago, Ill.
 Spotweld Co., Cleveland, Ohio.
 Taylor-Winfield Corp., Warren, Ohio.
 Thomson Electric Welder Co., Lynn, Mass.
 Welding Machines Mfg. Co., Detroit, Mich.

WELDERS, RESISTANCE

Acme Electric Welder Co., Los Angeles, Calif.
 Acro Welder Mfg. Co., Milwaukee, Wis.
 Banner Products Co., Milwaukee, Wis.
 DoALL Co., Des Plaines, Ill.
 Eisler Engineering Co., Newark, N. J.
 Expert Welding Machine Co., Detroit, Mich.
 Grob, Inc., Grafton, Wis.
 Micro Products Co., Chicago, Ill.
 National Electric Welding Machines Co., Bay City, Mich.
 Peer, Inc., Benton Harbor, Mich.
 Progressive Welder Sales Co., Detroit, Mich.
 Rex Welder Co., Kansas City, Mo.
 Royson Engineering, Hatboro, Pa.
 Sciaky Bros., Inc., Chicago, Ill.
 Spotweld Co., Cleveland, Ohio.
 Taylor-Winfield Corp., Warren, Ohio.
 Thomson Electric Welder Co., Lynn, Mass.
 Weldex, Inc., Detroit, Mich.
 Westinghouse Electric Corp., Pittsburgh, Pa.

WELDERS, SEAM

Acme Electric Welder Co., Los Angeles, Calif.
 Acro Welder Mfg. Co., Milwaukee, Wis.
 Banner Products Co., Milwaukee, Wis.
 National Electric Welding Machines Co., Bay City, Mich.
 Peer, Inc., Benton Harbor, Mich.
 Progressive Welder Sales Co., Detroit, Mich.
 Rex Welder Co., Kansas City, Mo.
 Sciaky Bros., Inc., Chicago, Ill.
 Solar Aircraft Co., San Diego, Calif.
 Spotweld Co., Cleveland, Ohio.
 Taylor-Winfield Corp., Warren, Ohio.
 Thomson Electric Welder Co., Lynn, Mass.
 Weldex, Inc., Detroit, Mich.
 Welding Machines Mfg. Co., Detroit, Mich.

WELDERS, SPOT

Acme Electric Welder Co., Los Angeles, Calif.
 Acro Welder Mfg. Co., Milwaukee, Wis.
 Alphal Spot Welding Co., Brooklyn, N. Y.
 Ampower Products Co., Oak Lawn, Ill.
 Appliances Co., Chicago, Ill. (Portable)
 Banner Products Co., Milwaukee, Wis.
 Duro-Dyne Corp., New Hyde Park, L. I., N. Y. (Portable)
 Eisler Engineering Co., Newark, N. J.
 Expert Welding Machine Co., Detroit, Mich.
 Fern, Ralph, Scanton, Pa.
 Graham Mfg. Corp., Royal Oak, Mich.
 Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
 Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
 Micro Products Co., Chicago, Ill.
 Mid-States Welder Mfg. Co., Chicago, Ill. (Portable)
 Miller Electric Mfg. Co., Inc., Appleton, Wis.
 National Electric Welding Machines Co., Bay City, Mich.
 National Cylinder Gas Co., Chicago, Ill.

Peer, Inc., Benton Harbor, Mich.
 Progressive Welder Sales Co., Detroit, Mich.
 Rex Welder Co., Kansas City, Mo.
 Ross Machine Tool Co., Chicago Ridge, Ill.
 Sciaky Bros., Inc., Chicago, Ill.
 Spotweld Co., Cleveland, Ohio.
 Taylor-Winfield Corp., Warren, Ohio.
 Thomson Electric Welder Co., Lynn, Mass.
 Weldex, Inc., Detroit, Mich.
 Welding Machines Mfg. Co., Detroit, Mich.
 Westinghouse Electric Corp., Pittsburgh, Pa.

WELDING FLUX

See Flux, Welding

WELDING ROD

See Rod, Welding

WELDING TORCHES

See Torches, Brazing, Cutting, Welding

WHEELS, BLOWER

Advance Aluminum Castings Corp., Chicago, Ill.
 Air Controls, Inc., Cleveland, Ohio.
 Airfan Engineering Co., Los Angeles, Calif.
 Ammerman Co., C. L., Minneapolis, Minn.
 Barry Blower Co., Minneapolis, Minn.
 Bayley Blower Co., Milwaukee, Wis.
 Bishop & Babcock Mfg. Co., Cleveland, Ohio.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brundage Co., Kalamazoo, Mich.
 Carolina Blower Co., Inc., Greensboro, N. C.
 Champion Blower & Forge Co., Lancaster, Pa.
 Chicago Blower Corp., Franklin Park, Ill.
 Clarage Fan Co., Kalamazoo, Mich.
 Connecticut Blower Co., Hartford, Conn.
 Denbo Engineering and Sales Co., Inc., Indianapolis, Ind. (Plastic)
 Garden City Fan Co., Chicago, Ill.
 General Blower Co., Morton Grove, Ill.
 Hastings Air Conditioning Co., Inc., Hastings, Nebr.
 Jan-Air, Inc., Richmond, Ill.
 Lau Blower Co., Dayton, Ohio.
 Martin Fan & Blower Co., Chicago, Ill.
 Master Appliance Mfg. Co., Racine, Wis.
 Mayne Products Co., Dayton, Ohio.
 Morrison Products, Inc., Cleveland, Ohio.
 Peerless Electric Co., Warren, Ohio.
 Revcor, Carpentersville, Ill.
 Robinson Ventilating Co., Zelienople, Pa.
 Schwitzer-Cummins Co., Indianapolis, Ind.
 Torrington Mfg. Co., Torrington, Conn.
 Triangle Mfg. Co., Oshkosh, Wis.
 United States Air Conditioning Corp., Minneapolis, Minn.
 Utility Appliance Corp., Los Angeles, Calif.
 Utility Fan Corp., Div. of Utility Appliance Corp., Los Angeles, Calif.
 Vernco Corp., Columbus, Ind.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., Cleveland, O.
 Western Blower Co., Seattle, Wash.
 Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.

WINDOW AIR CONDITIONER COVERS

See Protectors, Window Air Conditioner

WINDOW COOLING UNITS

See Units, Air Conditioning, Room Type, Window

WINDOW PANELS FOR AIR CONDITIONERS

See Panels, Window, Air Conditioner

WINDOWS, METAL, HOLLOW OR EXTRUDED

Adams Co., Dubuque, Iowa.
 Biersach & Neidermeyer Co., Milwaukee, Wis.
 Detroit Steel Products Co., Detroit, Mich.
 General Bronze Corp., Garden City, L. I., N. Y.
 International Steel Co., Evansville, Ind.
 Jamestown Metal Corp., Jamestown, N. Y.
 New Monarch Machine & Stamping Co., Des Moines, Ia.
 Perkinson, William J., Chicago, Ill.
 Republic Steel Corp., Cleveland, O.
 Reynolds Metals Co., Louisville, Ky.

Russell Co., F. C., Cleveland, Ohio.
 Steelcraft Mfg. Co., Rossmyre, O.
 Truscon Steel Div., Republic Steel Corp., Youngstown, O.
 Vallas Lionel, Chicago, Ill.
 Willis Steel Corp., Galesburg, Ill.

WINTER AIR CONDITIONERS

See Furnaces, Forced Air

WINTER PROTECTIVE COMPOUNDS

See Compounds, Winter Protective, Pump

WIRE

Allegheny Ludlum Steel Corp., Pittsburgh, Pa. (Stainless)
 Aluminum Co. of America, Pittsburgh, Pa. (Aluminum)
 American Nickeloid Co., Peru, Ill. (Chrome, nickel coated)
 American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.
 Armco Steel Corp., Middletown, Ohio. (Stainless steel)
 Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y. (Lead, tin, cadmium, zinc)
 Berger Mfg. Div., Republic Steel Corp., Canton, Ohio. (Galv.)
 Bethlehem Steel Co., Bethlehem, Pa. (Plain, galvanized)
 Bridgeport Brass Co., Bridgeport, Conn. (Brass, bronze)
 Chase Brass & Copper Co., Inc., Waterbury, Conn. (Copper)
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (Copper covered steel)
 Crucible Steel Co. of America, Pittsburgh, Pa. (Stainless steel and titanium)
 Division Lead Co., Summit, Ill. (Lead, tin)
 Downs-Smith Brass & Copper Co., Inc., New York, N. Y. (Copper and copper alloys)

Hussey & Co., C. G., Pittsburgh, Pa. (Copper)
 International Nickel Co., Inc., New York, N. Y. (Nickel & nickel alloys)
 Jones & Laughlin Steel Corp., Pittsburgh, Pa. (Steel)
 Kaiser Aluminum & Chemical Corp., Oakland, Calif. (Aluminum)
 Laclede Steel Co., St. Louis, Mo.
 National Lead Co., New York, N. Y. (Lead & tin)
 Nichols Wire & Aluminum Co., Davenport, Ia. (Aluminum)
 Page Steel & Wire Div., American Chain & Cable Co., Inc., Monessen, Pa. (Carbon steel & stainless steel)
 Republic Steel Corp., Cleveland, Ohio. (Steel)
 Reynolds Metals Co., Louisville, Ky. (Aluminum)
 Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala. (Steel)
 United Wire & Supply Corp., Providence, R. I. (Aluminum, Copper & copper base alloy)
 Youngstown Sheet & Tube Co., Youngstown, Ohio.

WIRE GLASS

See Glass, Wire

WIRING MACHINES

See Machines, Wiring

YEAR 'ROUND UNITS

See Units, Air Conditioning

ZONE CONTROLS

See Controls; Control Systems

NAMES AND ADDRESSES OF NATIONAL ENGINEERING SOCIETIES, ASSOCIATIONS, ETC.

- Acoustical Society of America, 205 W. Monroe St., Chicago 6, Ill.
- Air Conditioning Blower Manufacturers Association, 2300 Payne Ave., Cleveland 14, Ohio.
- Air-Conditioning and Refrigeration Institute, 1346 Connecticut Ave., N. W., Washington 6, D. C.
- Air-Conditioning and Refrigeration Wholesalers, 2607 N. High St., Columbus, Ohio.
- Air Distribution Institute, 2130 Keith Bldg., Cleveland 15, Ohio.
- Air Filter Institute, 25000 Miles Road, Cleveland 28, Ohio.
- Air Pollution Control Association, 4400 Fifth Ave., Mellon Institute Building, Pittsburgh 13, Pa.
- Aluminum Association, 420 Lexington Ave., New York 17, N. Y.
- American Foundrymen's Association, 616 S. Michigan Ave., Chicago, Ill.
- American Gas Association, 420 Lexington Ave., New York 17, N. Y.
- American Industrial Hygiene Association, 4400 Fifth Ave., Pittsburgh 13, Pa.
- American Institute of Architects, 1741 New York Ave., Washington, D. C.
- American Institute of Electrical Engineers, 33 W. 39th St., New York 18, N. Y.
- American Institute of Wholesale Plumbing & Heating Supply Associations, Inc., 402 Albee Bldg., Washington, D. C.
- American Iron and Steel Institute, 350 Fifth Ave., New York 1, N. Y.
- American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa.
- American Society of Heating and Air-Conditioning Engineers, 62 Worth St., New York 13, N. Y.
- American Society of Heating and Air Conditioning Engineers, Research Laboratory, 7218 Euclid Ave., Cleveland 3, Ohio.
- American Society of Mechanical Engineers, 29 W. 39th St., New York 18, N. Y.
- American Society of Refrigerating Engineers, 234 Fifth Ave., New York 1, N. Y.
- American Standards Association, 70 E. 45th St., New York, N. Y.
- American Welding Society, 33 W. 39th St., New York 18, N. Y.
- American Zinc Institute, Inc., 60 E. 42nd St., New York 17, N. Y.
- Anthracite Institute, 237 Old River Rd., Wilkes Barre, Pa.
- Bituminous Coal Institute, Southern Bldg., Washington 5, D. C.
- Bituminous Coal Research, Inc., 2609 First National Bank Bldg., Pittsburgh 22, Pa.
- Building Research Advisory Board, National Academy of Sciences, National Research Council, 2101 Constitution Ave., Washington 25, D. C.
- Cooling Tower Institute, 444 Emerson St., Palo Alto, Calif.
- Copper and Brass Research Association, 420 Lexington Ave., New York 17, N. Y.
- Gas Appliance Manufacturers' Association, 60 E. 42nd St., New York 17, N. Y.
- Humidifier Association, 2300 Payne Ave., Cleveland 14, Ohio.
- Independent Insulating Contractors National Association, Room 210, Shoreham Bldg., Washington 5, D. C.
- National Association of Fan Manufacturers, 2159 Guardian Bldg., Detroit 26, Mich.
- National Association of Practical Refrigerating Engineers, 435 N. Waller Ave., Chicago 44, Ill.
- National Association of Sheet Metal Distributors, 505 Arch St., Philadelphia 3, Pa.

NAMES AND ADDRESSES OF NATIONAL ENGINEERING SOCIETIES, ASSOCIATIONS, ETC.

- National Board of Fire Underwriters, 85 John St., New York 38, N. Y.
- National Bureau of Standards, Washington 25, D. C.
- National Coal Association, Southern Bldg., 15th and H Sts., N. W., Washington 5, D. C.
- National Electrical Manufacturers Association, 155 E. 44th St., New York 17, N. Y.
- National Fire Protection Association, 60 Batterymarch St., Boston, Mass.
- National Heating & Airconditioning Wholesalers, Inc., 1200 West Fifth Ave., Columbus, O.
- National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.
- National Warm Air Heating and Air Conditioning Association, 640 Engineers Bldg., Cleveland 14, Ohio.
- National Warm Air Heating and Air Conditioning Association, Canadian Chapter, 4195 Dundas St., W., Suite 301, Toronto 18, Ontario, Canada.
- Oil-Heat Institute of America, 500 Fifth Ave., New York 36, N. Y.
- Power Fan Manufacturers' Association, 2159 Guardian Bldg., Detroit 26, Mich.
- Refrigeration and Air Conditioning Contractors Association, National, 10660 Carnegie Ave., Cleveland 6, Ohio.
- Refrigeration Equipment Wholesalers Association, 2607 N. High St., Columbus, Ohio.
- Refrigeration Industry Safety Advisory Committee, 1346 Connecticut Ave., N. W., Washington 6, D. C.
- Refrigeration Service Engineers Society, 433 N. Waller Ave., Chicago 44, Ill.
- Refrigeration Trade Association of America, 3531 14th St., N. W., Washington 10, D. C.
- Sheet Metal Contractors National Association, 170 Division St., Elgin, Ill.
- Stoker Manufacturers Association, 307 N. Michigan Ave., Chicago 1, Ill.
- Underwriters' Laboratories, 207 E. Ohio St., Chicago 11, Ill.

Section of
American Artisan
1956 DIRECTORY OF WARM AIR HEATING, RESIDENTIAL
AIR CONDITIONING AND SHEET METAL PRODUCTS
[PART 3—ALL TRADE NAMES]

A

AAF—Air Filters. American Air Filter Co., Inc., Louisville, Ky.
ABC—Blower-Washer Units. American Blower Corp., Detroit, Mich.
ABC—Oil Burners. Automatic Burner Corp., Chicago, Ill.
Abrams—Furnace Brushes. Worcester Brush & Scraper Co., Div. Mason Worcester Co., Worcester, Mass.
Absoplane—Stainless Steel Sheets. Apollo Metal Works, Chicago, Ill.
ACB—Metal Protecting Paint. Tropical Paint Co., Cleveland, Ohio.
Ace—Dampers Regulators. Martens & Stormoen Co., West Quincy, Mass.
Acid-Proof—Insulating Cement. Quigley Co., New York, N.Y.
Acoustiglu—Cement. Hetzel Roofing Products Co., Inc., Newark, N. J.
Acoustilite—Insulation. Insulite Div., Minnesota and Ontario Paper Co., Minneapolis, Minn.
Acratherm—Thermostats. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Ad-A-Draft—Mechanical Draft Boosters. National Fuel Conservation Co., Inc., White Plains, N.Y.
Ada-Stic—Insulating Cement. Botfield Refractories Co., Philadelphia, Pa.
Adacast—Refractories. Botfield Refractories Co., Philadelphia, Pa.
Adamant—Insulating Cement. Refractories. Botfield Refractories Co., Philadelphia, Pa.
Adams—Furnaces. Donaldson Power Ventilator Co., North Hollywood, Calif.
Adapatch—Refractories. Botfield Refractories Co., Philadelphia, Pa.
Adapto—Gas and Oil Furnaces. Mammoth Furnace Co., St. Paul, Minn.
A-D Board—Asbestos Cement Sheets. Philip Carey Mfg. Co., Cincinnati, Ohio.
Aeracool—Fan Blades, Fans, Louvers and Shutters. Myers Electric Co., Inc., Pittsburgh, Pa.
Aerisweld—Welding Rod. Lincoln Electric Co., Cleveland, Ohio.
Aerocor—Furnace Insulation. Owens-Corning Fiberglas Corp., Toledo, O.
Aerofan—Fans. Pryne & Co., Inc., Pomona, Calif.
Aerofil—Filters. Besser Metal Products Corp., Charlotte, N.C.
Aerofuse—Air Diffusers. Tuttle & Bailey, Inc., New Britain, Conn.
Aerolag—Duct Insulation. Johns-Manville, New York, N. Y.

Aerolux—Oil Furnaces. S. T. Johnson Co., Oakland, Calif.
Aeromatic—Furnaces. United Air Heaters, Inc., Seattle, Wash.
Aeromatic Exhauster—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.
Aeropel—Kitchen Exhaust Fans. American Blower Corp., Detroit, Mich.
Aeroplane—Ventilators. Paul R. Jordan & Co., Inc., Indianapolis, Ind.
Aeroplex—Blowers. Bayley Blower Co., Milwaukee, Wis.
Aeropull—Ventilators. Paul R. Jordan & Co., Inc., Indianapolis, Ind.
Aerosolve—Filters. Cambridge Filter Corp., Syracuse, N. Y.
Aerovane—Anemometers. Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
Aerovane—Grilles, Registers. Tuttle & Bailey, Inc., New Britain, Conn.
Aertite—Waterproofing. Johns-Manville, New York, N. Y.
Afco—Blowers, Blower-Filters, Gas and Oil Burners, Furnaces, Stokers, Air Conditioning Units. American Furnace Co., St. Louis, Mo.
Afco Comfortmaker—Air Conditioning Units. American Furnace Co., St. Louis, Mo.
Afco Duo Blo—Furnaces. American Furnace Co., St. Louis, Mo.
Afco Master-Gas—Furnaces. American Furnace Co., St. Louis, Mo.
Afco Oil Master—Furnaces. American Furnace Co., St. Louis, Mo.
Affco—Louvers. American Foundry & Furnace Co., Bloomington, Ill.
A.G.—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.
Age—Oil Burners. All-Gas Equipment Co., Milwaukee, Wis.
Agilene—Pipe and Fittings, Plastic Ducts, Plastic Tubing. American Agile Corp., Bedford, Ohio.
Agilide—Plastic Tubing. American Agile Corp., Bedford, O.
Agitair—Air Diffusers, Filters, Ventilators. Air Devices Inc., New York, N.Y.
Airacoustic—Insulation. Johns-Manville, New York, N.Y.
Aircell—Duct Insulation. Norristown Magnesia & Asbestos Co., Norristown, Pa.
Airco—Flux, Welding Rod, Torches and Welding Equipment. Air Reduction Sales Co., New York, N.Y.
Air-Con—Registers. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
Air Control—Air Conditioning Units, Blowers, Blower-Filter Units, Blower Housings, Coils, Registers, and Blower Wheels. Hastings Air Conditioning Co., Inc., Hastings, Nebr.

Air Controls—Ridge Ventilator. Plasteel Products Co., Washington, Pa.
Air-Cote—Insulation. Sprayo-Flake Co., Chicago, Ill.
Aircoustat—Sound Absorbers. Industrial Sound Control, Inc., Hartford, Conn.
Aire-Flo—Blower-Filters, Furnaces. Lennox Industries, Inc., Marshalltown, Iowa.
Aire-RAY-ator—Furnaces. Ray Oil Burner Co., San Francisco, Calif.
AIRrefrigeration—Air Conditioning Units. The Williamson Co., Cincinnati, O.
Airette—Ventilators and Fans. Penn Ventilator Co., Philadelphia, Pa.
Airex—Evaporative Coolers, Blowers, Fans, Washers. Mountain States Equipment Co., Denver, Colo.
Airflo—Duct Accessories. Inland Steel Products Co., Milwaukee, Wis.
Air-Flo—Motor Operated Louvers. Air Conditioning Products Co., Detroit, Mich.
Airfoil—Fans, Fan Blades, Ventilators. Aerovent Fan Co., Piqua, Ohio.
Airfoil—Grilles, Louvers, Registers, Diffusers. Titus Mfg. Corp., Waterloo, Iowa.
Air Guide—Duct Vanes. Titus Mfg. Corp., Waterloo, Iowa.
Airistocrat—Fan Blades. Torrington Mfg. Co., Torrington, Conn.
Airjector—Ventilators. Swartwout Co., Cleveland, Ohio.
Air-Jet—Prefabricated Chimney. General Products Co., Fredericksburg, Va.
Air-Lift—Blowers and Fans. Mauer Engineering, Evanston, Ill.
Airlift—Ventilators. Swartwout Co., Cleveland, Ohio.
Airline—Heating and Cooling Equipment. Ingersoll Conditioned Air Div., Borg-Warner Corp., Kalamazoo, Mich.
Air-line—Baseboard Diffusers, Del Wellcome Engineering Co., Clarendon Hills, Ill.
Airliner—Fan Blades. Alan E. Burden Co., Los Angeles, Calif.
Airlouver—Louvers. Swartwout Co., Cleveland, Ohio.
Airmaster—Dehumidifiers. Walter Haertel Co., Minneapolis, Minn.
Airmat—Throwaway Filters. Aigard Mfg. Co., Chicago, Ill.
Air-Mat—Dust Collectors, Filters. American Air Filter Co., Inc., Louisville, Ky.
Air-Max—Blowers, Dampers, Diffusers and Fans. Gallaher Co., Omaha, Nebr.
Air Meter—Anemometers. Hastings Instrument Co., Inc., Hampton, Va.
Airmover—Ventilators. Swartwout Co., Cleveland, Ohio.
Air-Mepeler—Roof Ventilators. C. L. Ammerman Co., Minneapolis, Minn.

- Airo-Flex**—Directional Flow Registers. Auer Register Co., Cleveland, Ohio.
- Air O Fresh**—Air Sterilizers. Melco Products, Inc., Minneapolis, Minn.
- Air-O-Matic**—Air Conditioning Units. Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
- Airotor**—Blower Wheels. Torrington Mfg. Co., Torrington, Conn.
- Air-Out**—Ventilator. Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
- Airphlo**—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.
- Air Power**—Ventilating Systems. Martin Fan & Blower Co., Chicago, Ill.
- Air Power**—Blower Controls. A-P Controls Corp., Milwaukee, Wis.
- Air-Rad**—Air Conditioning Units. Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
- Airman**—Wire Cloth Filters. Air Filter Corp., Milwaukee, Wis.
- Air-Seel**—Oil Burners. Caloril Burner Corp., Hartford, Conn.
- Air Set**—Combustion Chambers. Harvey, Inc., Sid, Valley Stream, N. Y.
- Airstat**—Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
- Air-Trim**—Baseboard Diffusers. Vulcan Radiator Co., Hartford, Conn.
- Air Tumbler**—Dust Collectors. Dust Suppression & Engineering Co., Lake Orion, Mich.
- Air-Turn**—Vaness. Barber-Colman Co., Rockford, Ill.
- Air-Van**—Fans. Gallaher Co., Omaha, Nebr.
- Air-Vane**—Registers. Rock Island Register Co., Rock Island, Ill.
- Air-Vent**—Roofing Felt. Ruberoid Co., New York, N.Y.
- Air Wall**—Furnaces, Registers. General Electric Co., Air Conditioning Div., Bloomfield, N. J.
- Air Wave**—Ventilating Fans. Trade-Wind Motorfans, Inc., Rivera, Calif.
- Air-X-Hauser**—Chimney Caps. Ventilators. G. C. Breidert Co., San Fernando, Calif.
- Air-X-It**—Ventilators. Octagon Ventilator Co., Chicago, Ill.
- AirXpeler**—Chimney Caps and Tops, Heating Coils, Exhausters, Fans, Blowers and Ventilators, Draft Boosters, Blower and Fan Housings, Blower Wheels. C. L. Ammerman Co., Minneapolis, Minn.
- Aktiv**—Cleaning Compound. Turco Products, Inc., Los Angeles, Calif.
- Alaco**—Vacuum Cleaner. Ace Co., Ocala, Fla.
- Alarm-A-Lite**—Heating Plant Failure Alarms. Custom Mfg. Co., Chicago, Ill.
- Alclad**—Sheets. Aluminum Company of America, Pittsburgh, Pa.
- Alco**—Ventilators. A. H. Lumm Co., Toledo, Ohio.
- Alcoa**—Aluminum Products. Aluminum Co. of America, Pittsburgh, Pa.
- Alcuplate**—Metal Sheets. General Plate Div., Metals & Controls, Attleboro, Mass.
- Alen**—Air Conditioning Units. Comfort Products Corp., Dallas, Tex.
- Alfer**—Metal Sheets. General Plate Div., Metals & Controls Corp., Attleboro, Mass.
- Alfol Asbestos**—Duct Insulation. Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.
- Allegheny Metal**—Stainless. Allegheny Ludlum Steel Corp., Pittsburgh, Pa.
- Allen**—Fans. Park Heating Specialties, Minneapolis, Minn.
- Allen-Flux**—Soldering Flux. L. B. Allen Co., Inc., Chicago, Ill.
- Allite**—Plastic Panels. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
- All-Sol**—Flux. L. B. Allen Co., Inc., Chicago, Ill.
- All-Tite**—Metal Stampings and Duct Turning Vanes. Elgen Mfg. Corp., Long Island City, N.Y.
- All Weather**—Air Conditioning Units. General Electric Co., Major Appliance Div., Room Air Conditioner Dept., Louisville, Ky.
- Alma**—Furnace Brushes. Worcester Brush & Scraper Co., Worcester, Mass.
- Almar**—Hand Slitting Machines, Power Flanging Machines. Ward Machinery Co., Chicago, Ill.
- Almar Easy**—Rotary Slitting Shears. Ward Machinery Co., Chicago, Ill.
- Alnifer**—Metal Sheets. General Plate Div., Metals & Controls, Attleboro, Mass.
- Alnor**—Thermometers. Illinois Testing Laboratories, Inc., Chicago, Ill.
- Alodine**—Aluminum surface treatment. American Chemical Paint Co., Ambler, Pa.
- Alpine**—Evaporative Coolers. International Metal Products Co., Phoenix, Ariz.
- Alsiplate**—Metal Sheets. General Plate Div., Metals & Controls, Attleboro, Mass.
- Alumaloy EZ Kleen**—Air Filters. Research Products Corp., Madison, Wis.
- Alumaroll**—Metal Awnings. Wagner Awning & Mfg. Co., Cleveland, Ohio.
- Alumaweld**—Flux and Solder. Johnson Mfg. Co., Inc., Mount Vernon, Iowa.
- Alumbrite**—Paint. Thompson & Co., Oakmont, Pa.
- Alumi-Flux**—Soldering Flux. L. B. Allen Co., Inc., Chicago, Ill.
- Alumilux**—Water Heaters. Clayton & Lambert Mfg. Co., Louisville, Ky.
- Aluminu**—Metal Cleaner. NuSteel Co., Chicago, Ill.
- Aluminized**—Clad Sheets. American Rolling Mill Co., Middletown, Ohio.
- Aluminweld**—Welding Rod. Lincoln Electric Co., Cleveland, Ohio.
- Alumi-Soder**—Aluminum Solder. L. B. Allen Co., Inc., Chicago, Ill.
- A-Lum-O-Aire**—Filters. Carey Electronic Engineering Co., Metal Wool Div., Springfield, Ohio.
- Alumseal**—Prefabricated Flashings. Wasco Flashing Co., Cambridge, Mass.
- AM**—Solder. Alpha Metals, Inc., Jersey City, N.J.
- Amazon**—Water Heaters. Mustee Heater Co., Cleveland, Ohio.
- Amco**—Cabinets. Atlas Mfg. Co., St. Paul, Minn.
- Amco**—Flux. American Solder & Flux Co., Philadelphia, Pa.
- Amcoil**—Air Conditioners. American Coils, Inc., Newark, N. J.
- Amer-glas**—Air Filters. American Air Filter Co., Inc., Louisville, Ky.
- Amer-glas**—Throwaway Filters. D. F. Bowman Co., Inc., New Albany, Ind.
- American**—Furnaces. Ryniker Steel Products Co., Billings, Mont.
- American**—Beadling and Crimping Machines. Chas. E. Kraus Mfg. Co., Louisville, Ky.
- American**—Humidity and Temperature Recorders, Thermometers. Manning, Maxwell and Moore, Inc., Stratford, Conn.
- American**—Water Heaters. Hotstream Heater Co., Cleveland, Ohio.
- American HV**—Filters. American Air Filter Co., Inc., Louisville, Ky.
- Amerivent**—Flue Pipe and Fittings. American Metal Products Co., Inc., Los Angeles, Calif.
- Amerjet**—Blow Pipe Collectors. American Air Filter Co., Inc., Louisville, Ky.
- Amerock**—Cabinet and Casing Hardware. American Cabinet Hardware Corp., Rockford, Ill.
- Aminco**—Hygrometers, Relays, Thermometers. American Instrument Co., Silver Spring, Md.
- Ampcoflex**—Plastic Sheets. Atlas Mineral Products Co., Mertztown, Pa.
- AMS**—Pumps. American-Marsh Pumps, Inc., Battle Creek, Mich.
- Amweld**—Grilles. American Welding & Mfg. Co., Building Products Div., Warren, O.
- Anaconda**—Copper and Brass Products. American Brass Co., Waterbury, Conn.
- Anchor**—Hangers. Royal-Apex Mfg. Corp., Brooklyn, N. Y.
- AnchorAire**—Furnaces. Anchor Div., Stratton & Terstegge Co., Inc., New Albany, Ind.
- Anchor Brand**—Rivets. Townsend Co., New Brighton, Pa.
- Anchorfast**—Nails. Independent Nail & Packing Co., Bridgewater, Mass.
- Anchorite**—Nails. Dickson Weatherproof Nail Co., Evanston, Ill.
- Anemotherm**—Air Velocity Meters. Anemostat Corp. of America, New York, N.Y.
- Angle-Check**—Inspection Tool for Sheet Metal Workers. Sheridan-Gray, Inc., Palos Verdes Estates, Calif.
- Anthra-flo**—Furnaces. Coal-O-Matic Co., Trucksville, Pa.
- Apartment**—Window Ventilating Fans. Autovent Fan & Blower Div., Herman Nelson Corp., Chicago, Ill.
- Apexo**—Roof Flashing. Simplex Mfg. Co., Fond du Lac, Wis.
- Aprilaire**—Humidifiers. Research Products Corp., Madison, Wis.
- Appton**—Pneumatic Hammer. Merchandising & Mfg. Associates, Inc., Lancaster, Pa.
- Apthorpe**—Oil Burner Nozzles. Boston Machine Works Co., Lynn, Mass.
- Aquabar**—Roof Cement. Continental Products Co., Euclid, Ohio.
- Aqua-Clear**—Rust Preventive. Sudbury Laboratory, South Sudbury, Mass.
- Aquadam**—Roof Cement, Waterproofing. Blue Ridge Talc Co., Inc., Henry, Va.
- Aquadam**—Roofing Felt. Johns-Manville, New York, N. Y.
- Aqua Fog**—Evaporative Condensers. Cobell Industries, Inc., Fort Worth, Tex.
- Aqua Proof**—Roofing Paint. Metropolitan Refining Co., Inc., Long Island City, N. Y.
- Aqua-Saver**—Cooling Towers. Peerless Products Div., United Cooling Towers, Inc., North Little Rock, Ark.
- Aqua-Scale**—Automatic Humidifier. J. P. Glasby Mfg. Co., Bloomfield, N. J.
- Aquasorb**—Rust Preventive Chemicals. Turco Products, Inc., Los Angeles, Calif.
- Aquatone**—Water Conditioning Compounds. Ampion Corp., Long Island City, N. Y.
- Aqualux**—Water Heaters. S. T. Johnson Co., Oakland, Calif.
- A&R**—Duct Dampers, Louvers and Shutters. Air & Refrigeration Corp., New York, N. Y.
- Arc-Eng**—Air Conditioning Registers. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
- Arcosite**—Flux. Arcos Corp., Philadelphia, Pa.
- Arctic Circle**—Evaporative Coolers. International Metal Products Company, Phoenix, Ariz.

Arex-Austor—Ventilators. Arex Co., Chicago, Ill.
Arid-Air—Dehumidifiers. Tamms Industries, Inc., Chicago, Ill.
Airin Accelerator—Louvers and Shutters. Arex Co., Chicago, Ill.
Airin Stationary—Louvers and Shutters. Arex Co., Chicago, Ill.
Armorize—Paint. Carter Paint Co., Liberty, Ind.
Armstrong—Compressors. General Machinery Co., Spokane, Wash.
Arrow—Furnaces. Dowagiac Steel Furnace Co., Dowagiac, Mich.
Arrow-Line—Water Heaters. Bastian-Morley Co., Inc., La Porte, Ind.
Arrowtrol—Registers. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
ASARCO—Sheets and Roofing. Federated Metals Div., American Smelting and Refining Co., New York, N.Y.
Asbestile—Roof Cement, Flashings. Johns-Manville, New York, N.Y.
Asbestite—Paint. Coopers Creek Chemical Corp., West Conshohocken, Pa.
Asbestocel—Furnace Insulation. Johns-Manville, New York, N.Y.
Asco—Relays, Switches, Valves. Automatic Switch Co., Orange, N. J.
Asco—Gutter Fittings and Accessories. Roof Flashings. Atchison Specialty Mfg. Co., Atchison, Kans.
Ash Pit—Gas Burner. Handley-Brown Heater Co., Jackson, Mich.
ASMC—Flux. Farrelloy Co., Philadelphia, Pa.
At-A-Glance—Oil Tank Gauge. Krueger Sentry Gauge Co., Green Bay, Wis.
ate—Welding timers. Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Atlas—Blowers, Direct Fired Heaters, Furnaces. International Sales Co., San Francisco, Calif.
Atlas—Diffusers, Grilles, Registers. J. B. Smith Co., Philadelphia, Pa.
Atomick—Nozzles, Humidifiers. Maid-O'-Mist, Inc., Chicago, Ill.
Atomist—Humidifiers. American Foundry & Furnace Co., Bloomington, Ill.
Atifan—Fans and Ventilators. Kool Air Engineering Co., San Bernardino, Calif.
Auto—Humidifier Valves. Maid-O'-Mist, Inc., Chicago, Ill.
Auto-Frye—Furnaces. Lennox Industries, Inc., Marshalltown, Ia.
Auto-Klean—Fuel Oil Filters. Cuno Engineering Corp., Meriden, Conn.
Automaze—Air Filters. Air-Maze Corp., Cleveland, O.
Autostart—Buffers. U. S. Electrical Motors, Inc., Los Angeles, Calif.
AW—Plates, Sheets, Hardened Masonry Nails. Alan Wood Steel Co., Conshohocken, Pa.
AX—Oil Burners. Aldrich Co., Wyoming, Ill.
Axiflo—Fans. Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
Axivane—Fans. Joy Mfg. Co., New Philadelphia, Pa.

B

B-60—Controls. General Controls Co., Glendale, Calif.
BAC—Refrigerating condensers and cooling towers. Baltimore Aircoil Co., Inc., Baltimore, Md.
BAC—Air Conditioning Unit. Brunner Mfg. Co., Utica, N. Y.
Badger—Time Switches. Reliance Automatic Lighting Co., Racine, Wis.
Baffle Mix—Refractories. Walsh Refractories Corp., St. Louis, Mo.
Ball Flame—Oil Burners. Kresno-Stamm Mfg. Co., Palisades Park, N. J.

Ball-Rite—Electric Drills. John Oster Mfg. Co., Milwaukee, Wis.
Balsam-Wool—Flexible Insulation. Wood Conversion Co., St. Paul, Minn.
Bankheat—Oil Burners. S. T. Johnson Co., Oakland, Calif.
Bantam—Motors. Small Motors, Inc., Chicago, Ill.
Bantam Bully—Air Hammer. Superior Pneumatic & Mfg., Inc., Cleveland, Ohio.
Barcol—Motors. Barber-Colman Co., Rockford, Ill.
Bar-Ox—Rust Inhibitor. Truscon Laboratories, Detroit, Mich.
Barrett Specification—Roofing Felt. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Bar Rust—Metal Protecting Paints. Midland Paint & Varnish Co., Cleveland, Ohio.
Basa—Mallets. Greene, Tweed & Co., North Wales, Pa.
Basmor—Furnace. Bastian-Morley Co., Inc., LaPorte, Ind.
Baso—Gas Pilots and Solenoid Valves. Milwaukee Gas Specialty Co., Milwaukee, Wis.
BB—Blast Gates, Roof Clips, Damper Clips and Tips, Conductor Fittings and Accessories, Snow Guards. Berger Brothers Co., Philadelphia, Pa.
B&B—Louvers & Shutters, Blower Wheels. Bishop & Babcock Mfg. Co., Cleveland, Ohio.
Beckett Commodore—Oil Burners. R. W. Beckett Corp., Elyria, Ohio.
Beloit—Sheet Metal Machines, Punches. Hendley & Whittemore Co., Beloit, Wis.
Bemis—Furnace Brushes. Worcester Brush & Scraper Co., Worcester, Mass.
Benda-Vane—Registers. Rock Island Register Co., Rock Island, Ill.
Berger—Cabinets and Casings, Gutter Accessories, Rooftrim. Republic Steel Corp., Cleveland, O.
Berloy—Building Products. Berger Mfg. Co., Div. Republic Steel Corp., Canton, Ohio.
Beth-Cu-Loy—Sheets. Bethlehem Steel Co., Bethlehem, Pa.
Better-Bilt—Furnaces. Barnes Heating & Ventilating Co., Long Beach, Calif.
B-H—Building Insulation. Baldwin-Hill Co., Trenton, N. J.
Bifurcator—Blowers. DeBothezat Fans Div. American Machine & Metals, Inc., East Moline, Ill.
Big Bully—Air Hammers. Superior Pneumatic & Mfg., Inc., Cleveland, Ohio.
Bildrite—Sheathing. Insulite Div. Minneapolis & Ontario Paper Co., Minneapolis, Minn.
Billy Penn—Chimney Caps, Gutter and Accessories, Roof Flashings, Mouldings and Trim, Furnace Pipe and Fittings, Ventilators. Penn Supply & Metal Corp., Philadelphia, Pa.
Biltwel—Furnaces. Fraser & Johnston Co., San Francisco, Calif.
Bitumastic—Paint. Koppers Co., Inc., Pittsburgh, Pa.
Bituseal—Paint. Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
Black Arrow—Fans, Spray Guns. Black Mfg. Co., Harrison, N.J.
Black Asphalt—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Black Diamond—Built-up Roofing. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Black Flash—Roof Cement. J. C. Whitlam Mfg. Co., Wadsworth, O.
Black Lap—Roof Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.

Blazecrete—Refractories. Johns-Manville, New York, N. Y.
Blend Air—Furnaces and Air Conditioning Units. Coleman Co., Inc., Wichita, Kans.
Blo-Aire—Blower-Filter Units. Meyer Furnace Co., Peoria, Ill.
Blo-Fan—Fans. Pryne & Co., Inc., Pomona, Calif.
Blowette—Blower-Filter Units. Lau Blower Co., Dayton, Ohio.
Blu-Blaze—Chimney Caps. Tesco, Inc., Tulsa, Okla.
Blu-Cold—Compressors. Lehigh Mfg. Co., Lancaster, Pa.
Blue Bird—Shears. Bergman Tool Mfg. Co., Inc., Buffalo, N. Y.
Bluebonnet—Air Conditioning Units. Forston Co., Houston, Tex.
Blue-Flame—Gas Burners. John Zink Co., Tulsa, Okla.
Blue Flame—Rotary Oil Burners. Calor-oil Burner Corp., Hartford, Conn.
Blue-Point—Drills. Snap-on Tools Corp., Kenosha, Wis.
Blue Ring—Conversion Gas Burners. Niagara Motors Corp., Dunkirk, N. Y.
Blu-Flame—Gas Unit Heaters. Vacuum Gas Burner Co., Olean, N.Y.
Blu-Flex—Hack Saw Blades. Millers Falls Co., Greenfield, Mass.
BNCO—Cabinets and Casings. Biersach & Neidermeyer Co., Milwaukee, Wis.
B-N Multi-stage—Oil Burners, Oil Furnaces. Benner-Nawman, Inc., Oakland, Calif.
Bob-Cat—Hand and Power Hoists. Ohio Hoist & Mfg. Co., Inc., Cleveland, O.
Bob Float Valves—Water Level Valves. Robert Mfg. Co., Los Angeles, Calif.
Boltaron—Non-Metallic Sheets, Plastic Tubing. H. N. Hartwell & Sons, Inc., Boston, Mass.
Bondmaster—Adhesives. Rubber and Asbestos Corp., Bloomfield, N.J.
Bondwich—Metal Sheets. General Plate Div., Metals & Controls, Attleboro, Mass.
Boomer—Furnaces. Hess-Snyder Co., Massillon, Ohio.
Boston Breeze—Oil Burners. Boston Machine Works Co., Lynn, Mass.
Boston Chrome Steel—Baffles. Boston Machine Works Co., Lynn, Mass.
Boyer—Power Hammers, Rivet Guns. Chicago Pneumatic Tool Co., New York, N. Y.
Bradford—Water Heaters. Pennsylvania Range Boiler Co., Philadelphia, Pa.
Branford—Oil Burners. Malleable Iron Fittings Co., Branford, Conn.
Brassweld—Steel Brazing Flux. Sight Feed Generator Co., West Alexandria, Ohio.
Brazaloy—Aluminum, cast iron, copper, magnesium and silver soldering flux. All-State Welding Alloys Co., Inc., White Plains, N. Y.
Brazo—Bronze Soldering Flux. Linde Air Products Co., New York, N. Y.
Breez-Air—Fans. Buffalo Forge Co., Buffalo, N. Y.
Breeze—Air Filters. Barnebey-Chaney Co., Pur Air Div., Columbus, O.
Breezebuilder—Fans. Bar-Brook Mfg. Co., Inc., Shreveport, La.
Breeze Conditioning—Ventilators. American Coolair Corp., Jacksonville, Fla.
Breezemaster—Fans. Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
Breezo—Kitchen Exhaust Fans. Buffalo Forge Co., Buffalo, N. Y.
Breezy-Air—Evaporative Coolers. Barwick Mfg. Corp., Wichita, Kans.
Brentwood—Floor Furnaces, Water Heaters. National Appliances, Inc., New Kensington, Pa.

Bressler—Draft Damper Motors. Kol-Master Corp., Oregon, Ill.
 Brilliant—Paint. Calbar Paint & Varnish Co., Philadelphia, Pa.
 Brilliant Fire—Furnaces. Ohio Foundry & Mfg. Co., Steubenville, Ohio.
 Bronco—Solder. General Plate Div., Metals & Controls Corp., Attleboro, Mass.
 Bronzoid—Bearings. Dodge Mfg. Corp., Mishawaka, Ind.
 Bronzweld—Cast Iron Brazing Flux. Sight Feed Generator Co., West Alexandria, Ohio.
 Brown Elektronik—Humidity and Temperature Recorders. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Brownskin—Vapor Barriers. Angier Corp., Framingham, Mass.
 Brule—Incinerators. Goder Incinerator Corp., Chicago, Ill.
 BTU—Furnace Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.
 Bulldog—Expansion Bolts, Electric Hammers. J. D. Polis Mfg. Co., Chicago, Ill.
 Bulldog—Snips and Shears. Wiss & Sons Co., Newark, N. J.
 Bundyweld—Tubing. Bundy Tubing Co., Detroit, Mich.
 Bunker Hill—Roofing, Sheets and Solder. Northwest Lead Co., Seattle, Wash.
 Burdock—Propeller Fan Blades. Alan E. Burden Co., Los Angeles, Calif.
 Burdick—Propeller Fan Blades. Alan E. Burden Co., Los Angeles, Calif.
 Burnall—Incinerators. General Engineering Co., Bay City, Mich.
 But-N-tite—Steel Roofing. St. Paul Corrugating Co., St. Paul, Minn.
 Buzzer—Gas Soldering Furnaces, Soldering Torches. Charles A. Hones, Inc., Baldwin, N. Y.
 B & W—Refractories & Furnace Insulation. Babcock & Wilcox Co., New York, N. Y.
 BX—Oil Burners. Aldrich Co., Wyoming, Ill.

C

C-10—High Temperature Paint. Laclede-Christy Clay Products Co., St. Louis, Mo.
 Cable King—Hoist. Yale & Towne Mfg. Co., Philadelphia, Pa.
 Calcoda—Waterproofing. Calbar Paint & Varnish Co., Philadelphia, Pa.
 California—Water Heaters. W. B. Bastian Mfg. Co., Los Angeles, Calif.
 Calka-Matic—Caulking Guns. Vital Products Mfg. Co., Cleveland, O.
 Calkmaster—Caulking Guns. Vital Products Mfg. Co., Cleveland, O.
 Calva-flux—Flux. London Chemical Co., Melrose Park, Ill.
 Capillary—Air Conditioning Units, Washers, Filters. Air & Refrigeration Corp., New York, N. Y.
 Capital—Furnaces. Farris Furnace Co., Springfield, Ill.
 Capitolaire—Furnaces and Air Conditioning Units. National-U.S. Radiator Corp., Johnstown, Pa.
 Capri—Air Conditioning Units. Frigid, Inc., Brooklyn, N.Y.
 Cara-Flux No. 400—Flux solution. Carajon Chemical Co., Inc., Fremont, Mich.
 Carbolite—Soot Remover. Ampion Corp., Long Island City, N. Y.
 Carbonaire—Oil Burners. Breeze Corps., Inc., Newark, N. J.
 Carburetor-Stoker—Industrial Stokers. Woolley Eng. Co., Detroit, Mich.
 Carex-CP3—Roof Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.

Carey Coating—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
 Careyclad—Metal Protecting Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
 Careyduct—Prefabricated Duct. Philip Carey Co., Cincinnati, Ohio.
 Careysote—Non-Metallic Sheets. Philip Carey Mfg. Co., Cincinnati, O.
 Carilloy—Plate. United States Steel Corp., Pittsburgh, Pa.
 Castalu—Blower Wheels. Advance Aluminum Castings Corp., Chicago, Ill.
 Castomatic—Solder. Federated Metals Div., American Smelting and Refining Co., New York, N. Y.
 Cast-Refract—Baffles. Quigley Co., Inc., New York, N. Y.
 Catomic—Combustion Heads. Quiet Automatic Burner Corp., Newark, N.J.
 Caulk-N-Seal—Caulking Compound. Blue Ridge Talc Co., Inc., Henry, Va.
 Caulk-O-Seal—Caulking and Glazing Compounds. Calbar Paint & Varnish Co., Philadelphia, Pa.
 Cauxeal—Compounds, X-Pando Corp., Long Island City, N. Y.
 CDC—Bearings and Pulleys. Chicago Die Casting Mfg. Co., Chicago, Ill.
 Ce-Co—Caulking Compounds & Paints. Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
 Cecotite—Roofing Paint. Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
 C-E Heatmaster—Water Heaters. Combustion Engineering Co., Inc., Chattanooga, Tenn.
 Ceil-N-Ventor—Fans. Universal Blower Co., Birmingham, Mich.
 Cello-Sponge—Evaporators. Viking Air Conditioning Corp., Cleveland, Ohio.
 Cell-Tite—Tubing Insulation. B. F. Goodrich Co., Sponge Products Div., Shelton, Conn.
 Cementkote—Paint. Tropical Paint Co., Cleveland, Ohio.
 Center-Finder—Protractor. Interstate Sales Co., New York, N. Y.
 Cen-Tri-Core—Solder. Alpha Metals, Inc., Jersey City, N. J.
 Centrifugal—Roof Ventilators. Burt Mfg. Co., Akron, Ohio.
 Centripeller—Ventilating Fans. Paul R. Jordan & Co., Inc., Indianapolis, Ind.
 Ceramiduct—Non-Metallic Duct. Straitsville Brick Co., New Straitsville, O.
 C-H—Relays, Switches and Valves. Cutler-Hammer, Inc., Milwaukee, Wis.
 Challenger—Fans. Signal Electric Div., King-Seely Corp., Menominee, Mich.
 Challenger—Furnaces. Wheeling Furnace Corp., Martins Ferry, Ohio.
 Challenger—Stokers. Kol-Master Corp., Oregon, Ill.
 Chamco—Building Insulation. Chamberlin Co. of America, Detroit, Mich.
 Champion—Water Heaters. Bastian-Morley Co., Inc., LaPorte, Ind.
 Champion—Water Heaters. Crane Co., Chicago, Ill.
 Channeldrain—Sheet Metal Roofing. Wheeling Corrugating Co., Wheeling, W. Va.
 Chester—Water Heaters. Ajax Thermostatic Controls Co., Gates Mills, Ohio.
 CHFS Co.—Metal Duct. Chicago Heights Furnace Supply Co., Chicago Heights, Ill.
 Chicago—Brakes and Presses. Dreis & Krump Mfg. Co., Chicago, Ill.
 Chicago—Toggle and Anchor bolts. Chicago Expansion Bolt Co., Chicago, Ill.
 Chicago Steel—Snips and Shears. W. A. Whitney Mfg. Co., Rockford, Ill.
 Chill Air—Evaporative Coolers, Fans, Recirculating Pumps. National Engineering & Mfg. Co., Sedalia, Mo.

Chimney Sweep—Soot Remover. G. N. Coughlan Co., West Orange, N. J.
 Chinook—Heating Coils. Bayley Blower Co., Milwaukee, Wis.
 Chore Boy—Conversion Gas Burner, Incinerator. Standard Fuel Engineering Co., Detroit, Mich.
 Chromar—Welding Rod. Arcos Corp., Philadelphia, Pa.
 Chromend—Welding Rod. Arcos Corp., Philadelphia, Pa.
 Chromtrim—Mouldings and Trim. R. D. Werner Co., Inc., New York, N. Y.
 Chronat—Furnace Repairs. National Foundry & Furnace Co., Dayton, Ohio.
 Chronotherm—Thermostats. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
 Chrysler-Airtemp—Heating and Cooling Equipment. Airtemp Div., Chrysler Corp., Dayton, Ohio.
 Cibulas—Puttyless Skylights. General Sheet Metal Works, Inc., Bridgeport, Conn.
 Cinch—Expansion Bolts. National Lead Co., New York, N. Y.
 Cinco—Windows. R. C. Russell Co., Cleveland, Ohio.
 Cinerator—Incinerators. Harmond Co., Cleveland, O.
 Cinkote—Paint. Blue Ridge Talc Co., Inc., Henry, Va.
 Cinti—Elbows. Cincinnati Elbow Co., Cincinnati, Ohio.
 Circulaire—Wall Furnaces. Hammel Radiator Eng. Co., Los Angeles, Calif.
 Circulataire—Furnace Fan. Corlett-Turner Co., Chicago, Ill.
 Circu-Ray—Furnaces. Temco, Inc., Nashville, Tenn.
 CJB—Bearings. Ahlberg Bearing Co., Chicago, Ill.
 C&L—Soldering Furnaces and Torches. Clayton & Lambert Mfg. Co., Louisville, Ky.
 Clason—Snow Guards. M. N. Cartier & Sons Company, Providence, R. I.
 Classic—Baseboard Diffusers. Vectaire Mfg. Co., Melrose, Mass.
 Cleanaire—Blower-Filter Units. Peerless Furnace and Foundry Co., Indianapolis, Ind.
 Clean Right—Soot Remover. General Filters, Inc., Novi, Mich.
 Clean Right—Soot Remover. Miller Product Co., Lansing, Mich.
 Clearview—Oil Tank Gauge. Boston Machine Works Co., Lynn, Mass.
 Cleveland—Burners, Furnaces. Dornback Furnace & Fdy. Co., Cleveland, Ohio.
 Cleveland—Water Heaters. Hotstream Heater Co., Cleveland, O.
 Climate Master—Furnaces, Air Conditioning Units. Hess Co., Chicago, Ill.
 Climatrol—Air Conditioning Units, Blower-Filter Units, Furnaces, Conversion Burners, Furnace Pipe, Humidifiers, Dehumidifiers, Incinerators, Registers. Mueller Climatrol, Milwaukee, Wis.
 Clima-Twin—Air Conditioning Units. Peerless Furnace and Foundry Co., Indianapolis, Ind. and Round Oak Co., Inc., Dowagiac, Mich.
 Clincher—Rain Goods and Accessories. Inland Steel Products Co., Milwaukee, Wis.
 Clipper—Furnaces. Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
 Clipper—Kitchen Exhaust Fans. Trade-Wind Motorfans, Inc., Rivera, Calif.
 Clipper—Ventilators. Riggins Metal Products, Inc., Kankakee, Ill.
 Closeteer—Furnaces. Sequoia Mfg. Co., San Carlos, Calif.
 CM—Cranes, Hoists. Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Tonawanda, N. Y.

Coats Atmospheric—Atmospheric Cooling Towers. Toungate & Coats, Austin, Tex.

Coats Hideway—Mechanical Draft Cooling Towers. Toungate & Coats, Austin, Tex.

Cog-Belt—V Belts. Dayton Rubber Co., Dayton, O.

Colcap—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.

Coldprest—Housings, Commercial Shearing & Stamping Co., Youngstown, Ohio.

Coldstream—Air Conditioning Units. Baker Refrigeration Corp., South Windham, Me.

Cole—Draft Governor. Cole-Sewell Engineering Co., Minneapolis, Minn.

Collopakes—Roofing Paint. Samuel Cabot, Inc., Boston, Mass.

Colmonoy—Welding Rod. Wall Colmonoy Corp., Detroit, Mich.

Colonial—Blower-Filter, Oil Burners, Furnaces, Humidifiers, Heaters, Stokers. Green Colonial Furnace Co., Des Moines, Ia.

Colonial—Rain Goods and Fittings. Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.

Columbia—Air Freshening Compounds. Carbide and Carbon Chemicals Co., Div. Union Carbide & Carbon Corp., New York, N. Y.

Columbia—Water Heaters. National Steel Construction Co., Inc., Logansport, Ind.

Columbia—Furnaces. Sandberg Mfg. Co., Portland, Ore.

Columbia—Insulation. United States Mineral Wool Co., Stanhope, N. J.

Columbia—Ventilators. E. E. Souther Iron Co., St. Louis, Mo.

Combi-Matic—Gas-Oil Burner. Siemon Mfg. Co., Grandview, Mo.

Combustioneer—Gas & Oil Burners, Furnaces, Humidifiers, & Stokers. Steel Products Engineering Co., Combustioneer Div., Springfield, Ohio.

Comet—Gas Water Heaters. Hoyt Heater Co. of No. Calif., Oakland, Calif.

Comet—Hoists. Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Tonawanda, N. Y.

Comfortaire—Furnaces. Hamel Radiator Engineering Co., Los Angeles, Calif.

Comfort Flo—Furnaces. Montag Inc., Portland, Ore.

Co-Min-Co—Insulating Cement. United States Mineral Wool Co., Stanhope, N. J.

Commander—Furnaces. Round Oak Co., Inc., of Indiana, Dowagiac, Mich.

Commercial-Aire—Direct Fired Oil Heaters. Mammoth Furnace Co., St. Paul, Minn.

Compact—Blowers. Bishop & Babcock Mfg. Co., Cleveland, Ohio.

Compact—Oil Burners. Breeze Corp., Inc., Newark, N. J.

Compacto—Furnaces. Mammoth Furnace Co., St. Paul, Minn.

Compass V-Steel—V-Belts. Goodyear Tire & Rubber Co., Inc., Akron, Ohio.

Complete-Aire—Air Conditioning Units. Continental Mfg. Co., Phoenix, Ariz.

Concavex—Bearings. Shafer Bearing Div., Chain Belt Co., Downers Grove, Ill.

Condor—Belts. Raybestos-Manhattan, Inc., Passaic, N. J.

Conflex—Solder. General Plate Div., Metals & Controls Corp., Attleboro, Mass.

Coni-Vane—Ventilators. Allen Cooler & Ventilator Inc., Rochester, Mich.

Connecticut—Hand Brakes. W. Whitney Stueck, Inc., Old Saybrook, Conn.

Consolaire—Air Conditioning Units.

Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.

Conterflow—Furnaces. Western Blower Co., Seattle, Wash.

Continental—Water Heaters. National Steel Construction Co., Inc., Logansport, Ind.

Contour-Aire—Furnaces and Oil Burners. Roscoe Mfg. Co., Seattle, Wash.

Convecton—Furnaces. L. J. Mueller Furnace Co., Milwaukee, Wis.

Convecton—Humidifiers. Maid-O'-Mist, Inc., Chicago, Ill.

Convertible—Air Conditioning Units. Lipman Refrigeration Div., Yates-American Machine Co., Betloft, Wis.

Convento—Ventilators. C. L. Ammerman Co., Minneapolis, Minn.

Coolair—Evaporative Cooler Units. Belmetals Mfg. Co., Inc., Belmont, Calif.

Coolair—Fans and Ventilators. American Coolair Corp., Jacksonville, Fla.

Cool-A-Matic—Window Air Conditioners. Automatic Firing Corp., St. Louis.

Cooler-Aire—Air Conditioning Unit. Baltimore Porcelain Steel Corp., Baltimore, Md.

Coolero—Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.

Cool-Fast—Air Conditioning Units. Kleer-Kleen Mfg. Co., Hayward, Calif.

Cooltong—Brazing Torches. Lincoln Electric Co., Cleveland, O.

Cooper-Kote—Sheet Metal Paint. Coopers Creek Chemical Corp., West Conshohocken, Pa.

Copper-Alloy—Sheets. Inland Steel Co., Chicago, Ill.

Copper-Fabric—Flashing. Wasco Products, Inc., Cambridge, Mass.

Copperseal—Flashing. Wasco Products, Inc., Cambridge, Mass.

Copperskin—Flashings. Angier Corp., Framingham, Mass.

Copper Steel—Copper Bearing Sheets. United States Steel Corp., Pittsburgh, Pa.

Cop-R-Loy—Copper Bearing Steel Sheets. Wheeling Corrugating Corp., Wheeling, W. Va.

Cop-R-Tex—Thru-Wall Flashing. Wasco Products, Inc., Cambridge, Mass.

Corkboard—Insulation. Armstrong Cork Co., Lancaster, Pa.

Corkboard—Insulation. Mundet Cork Corp., Brooklyn, N. Y.

Cork-Flex—Vibration Isolating Bases and Pads. Vibration Mountings, Inc., Elmhurst, N. Y.

Corktite—Insulation. Meadows, Inc., W. R., Elgin, Ill.

Coronado—Window Air Conditioners. General Appliance Corp., Greenville, Mich.

Corozone—Ozone Apparatus. Corozair Heater Corp., Cleveland, Ohio.

Corrulux—Plastic Panels. L. O. F. Glass Fibers Co., Toledo, O.

Cor Ten—Steel Plates. Tennessee Coal & Iron Div., U.S. Steel Corp., Fairfield, Ala.

Corvette—Water Heaters. Security Mfg. Co., Kansas City, Mo.

Cottrell Process—Collectors. Western Precipitation Corp., Los Angeles, Calif.

Counterflo—Direct Fired Heaters. Dravo Corp., Pittsburgh, Pa.

Covotop—Roofing Felt. Owens-Corning Fiberglas Corp., Toledo, O.

Cozy—Furnaces. Advance Furnace Co., Wichita, Kans.

CP—Electric Tools, Hoists. Chicago Pneumatic Tool Co., New York, N. Y.

C/R—Metal Working Mallets. Chicago Rawhide Mfg. Co., Chicago, Ill.

Cradle-Calker—Caulking Guns. Vital

Products Mfg. Co., Cleveland, O.

Crane Basmor—Furnaces. Bastian-Morley Co., Inc., LaPorte, Ind.

Crane-Line—Furnaces, Stokers. Crane Co., Chicago, Ill.

Crazy's—Cut-Offs. Galvan Mfg. Co., New Albany, Ind.

Crest—Water Heaters. Day & Night Div., Carrier Corp., Monrovia, Calif.

Crestoloy—Tools. Crescent Tool Co., Jamestown, N. Y.

Cris Cross—Furnace Brushes, Worcester Brush & Scraper Co., Div. Mason Worcester Co., Worcester, Mass.

Cromaloy—Stainless Soldering Flux. Linde Air Products Co., New York, N. Y.

Crosley—Window Air Conditioners. Avco Mfg. Co., Crosley and Bendix Home Appliances, Cincinnati, O.

Cross-Flo—Refrigerant Dehydrators. Remco, Inc., Zellenople, Pa.

Crusader—Oil Burners. Bethlehem Fdry. & Mach. Co., Bethlehem, Pa.

CSCO—Paint. Chemical Solvent Co., Birmingham, Ala.

Cupromatic—Electric Water Heaters. Cuprometal Mfg. Corp., Corona, N. Y.

Cushioned Power—Solenoid Valves. White-Rodgers Electric Co., St. Louis, Mo.

Custom-Aire—Furnaces. Heating Equipment Mfg. Co., San Francisco, Calif.

Customized—Electric Motors. Jack & Heintz, Inc., Cleveland, O.

Cyclo-Core—Rotary Drill Bits. New England Carbide Tool Co., Inc., Cambridge, Mass.

Cyclo-Twist—Masonry Drill Bits. New England Carbide Tool Co., Inc., Cambridge, Mass.

Cyclone—Hoists. Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Tonawanda, N. Y.

D

Dacor—Odor Adsorbers, Filters. Barney-Cheney Co., Pur Air Div., Columbus, O.

Damperset—Duct Dampers. Elgen Mfg. Corp., Long Island City, N. Y.

Damite—Waterproofing. Speco, Inc., Cleveland, O.

Da-Nite Acratherm—Thermostats. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Daptoblu—Gas Burners. Beck Engineering Combustion Company, St. Louis, Mo.

Dasco—Punches, Tools. Damascus Steel Products Corp., Rockford, Ill.

Dearborn Aire—Air Conditioning Units. Dearborn Stove Co., Dallas, Tex.

Dearsol—Fuel Oil Tank Solvents. Dearborn Chemical Co., Chicago, Ill.

Debecote—Paint. Debevoise Co., Brooklyn, N. Y.

Decoseal—Paints. Debevoise Co., Brooklyn, N. Y.

Defensite Tuf Quik—Paint. Wilbur & Williams Co., Brighton, Mass.

Deflecto—Baffles. Insulation & Refractories Co., Williamson, N. Y.

Deflectrol—Duct Turning Vanes. Barber-Colman Co., Rockford, Ill.

Degraco—Roofing Paint. Certain-teed Products Corp., Ardmore, Pa.

Dehydratone—Waterproofing. A. C. Horn Co., Inc., Long Island City, N. Y.

Deion—Time Switches. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

Delco-Heat—Oil Burners and Furnaces. Delco Appliance Div., General Motors Corp., Rochester, N. Y.

Delde—Punch Presses. Doelger & Kirsten, Inc., Milwaukee, Wis.

Delphos—Ridge Roll and Roofing. New Delphos Mfg. Co., Delphos, Ohio.
 Deluxe—Furnaces. The Williamson Co., Cincinnati, O.
 Deoxidine—Metal Protecting Paint. American Chemical Paint Co., Ambler, Pa.
 Dereka—Paint. Debevoise Co., Brooklyn, N. Y.
 Desert Air—Furnaces. Central States Mfg. Co., Inc., Arkansas City, Kans.
 De-Sta-Co—Blower Housings, Toggle Clamps and Stampings. Detroit Stamping Co., Detroit, Mich.
 Detroit Double Retort—Stokers. Detroit Stoker Co., Detroit, Mich.
 Detroit LoStoker—Stokers. Detroit Stoker Co., Detroit, Mich.
 Detroit Roto Grate Stoker—Stokers. Detroit Stoker Co., Detroit, Mich.
 Detroit RotoStoker—Overfeed Spreader Stoker. Detroit Stoker Co., Detroit, Mich.
 Detroit UniStoker—Stokers. Detroit Stoker Co., Detroit, Mich.
 Dexion—Angles. Acme Steel Co., Chicago, Ill.
 Dexter Heat Valve—Ventilators. Swartwout Co., Cleveland, Ohio.
 DFC—Insulating Cement. Denver Fire Clay Co., Denver, Colo.
 Di-Acro—Sheet Metal Working Machines. O'Neil-Irwin Mfg. Co., Lake City, Minn.
 Dial—Damper Regulator. Martens & Stormoen Co., West Quincy, Mass.
 Dial-Set—Stokers. Kol-Master Corp., Oregon, Ill.
 Diamond—Caulking Compounds, Paint. Thompson & Co., Oakmont, Pa.
 Diamond—Smoke Pipe Dampers. Adams Co., Dubuque, Iowa.
 Diamond H—Controls, Switches. Hart Mfg. Co., Hartford, Conn.
 Diffusaire—Air Diffusers. Hart & Cooley Mfg. Co., Holland, Mich.
 Directrol—Duct Turning Vanes. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
 Divco—Brushes, Flashing, Flux, Sheets, Solder. Division Lead Co., Summit, Ill.
 Dixie—Water Heaters. Hotstream Heater Co., Cleveland, Ohio.
 Dixie Star—Water Heaters. Hotstream Heater Co., Cleveland, Ohio.
 Do-All—Electric Hammer. Wodack Electric Tool Corp., Chicago, Ill.
 Dodge-Timken—Bearings. Dodge Mfg. Corp., Mishawaka, Ind.
 Domestigas—Gas Conversion Burners. Thermex Engineering Co., Chicago, Ill.
 Domex—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
 Do-Mor—Adj. Keyhole Saw. Pioneer Tool Co., Racine, Wis.
 Dorex—Odor Absorbers. Connor Eng. Corp., Danbury, Conn.
 Double Diamond—Psychrometers, Relays, Switches, Thermometers. H-B Instrument Co., Philadelphia, Pa.
 Double-Duty—Oil Burners. Breeze Corps., Inc., Newark, N. J.
 Double-Seal—Humidifier Fittings. Hays Mfg. Co., Erie, Pa.
 DovRloy—Sheets. Reeves Steel & Mfg. Co., Dover, Ohio.
 Dowex—Water Conditioning Compounds. Dow Chemical Co., Midland, Mich.
 Downmetal—Plates, Sheet, Light Weight Shapes, Welding Rod, Sheets. Dow Chemical Co., Midland, Mich.
 Downflame—Gas-Oil Burners, Floor Furnaces. United Air Heaters, Inc., Seattle, Wash.
 Downflo—Furnaces. United Air Heaters, Inc., Seattle, Wash.
 Draft-A-Justor—Barometric Dampers.

Preferred Utilities Mfg. Corp., New York, N. Y.
 Draftender—Gravity Furnace Control Systems. Penn Controls, Inc., Goshen, Ind.
 Draft Korektor—Damper. Cole-Sewell Engineering Co., Minneapolis, Minn.
 Draft-O-Stat—Barometric Dampers. Hotstream Heater Co., Cleveland, Ohio.
 Draftrite—Draft Gages. Bacharach Industrial Instrument Co., Pittsburgh, Pa.
 Drifilter—Filters. American Air Filter Co., Inc., Louisville, Ky.
 Drifilter—Filters. Airgard Mfg. Co., Chicago, Ill.
 Dri-Lap—Sheet Metal Roofing. Newport Steel Corp., Newport, Ky.
 Dri-N-Tite—Roof Cement. A. C. Horn Co., Inc., Long Island City, N. Y.
 Drive-It—Powder Charged Power Hammers, Masonry Nails. Powder Power Tool Corp., Portland, Ore.
 Drive-Rite—Aluminum Nails. Independent Nail & Packing Co., Bridgewater, Mass.
 Dry Kiln—Furnace Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.
 Driwal—Waterproofing. Glidden Co., Cleveland, O.
 Dryola—Incinerators. General Engineering Co., Bay City, Mich.
 Dual-A-Fire—Gas-Oil Combination Burners and Furnaces. Automatic Firing Corp., St. Louis, Mo.
 Dual Arc—Arc Welders. Electric Arc, Inc., Newark, N. J.
 Dual-Clone—Blow Pipe Collectors. Day Co., Minneapolis, Minn.
 Dual-Dial—Tank Gauge. Rochester Mfg. Co., Inc., Rochester, N. Y.
 Dual-Matic—Gas-Oil Combination Burners. J. C. Junior Co., Kansas City, Mo.
 Dualvent—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.
 Dubblseal—Sheeting. Masonite Corp., Chicago, Ill.
 Dubl-Dome—Skylights. Bettcher Plastics Co., Portland, Ore.
 Ducean—Metal Cleaner. E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.
 Duco—Paint. E. I. du Pont de Nemours & Co., Wilmington, Del.
 Ductboard—Prefabricated Ducts. Sall Mountain Co., Hamilton, Ohio.
 Duct Master—Notching Machines. Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
 Duct Soundliner—Duct Insulation. Baldwin-Hill Co., Trenton, N. J.
 Ducturns—Vanes. Tuttle & Bailey, Inc., New Britain, Conn.
 Ductype—Fans. South Bend Air Products, Inc., South Bend, Ind.
 Dulux—Enamels, Lacquers and Paints. E. I. du Pont de Nemours & Co., Wilmington, Del.
 Duo-Gyrovan—Fans. Dual-Air Fan Co., Hampshire, Ill.
 Duo-Tone—Aluminum Awnings. Koolvent Metal Awnings Corp. of America, Pittsburgh, Pa.
 Duplex—Roofing Cement. Johns-Manville, New York, N.Y.
 Duplex Twin—Vibration Isolating Pads. Korfund Co., Long Island City, N.Y.
 DuraBilt—Gravity Registers. Auer Register Co., Cleveland, Ohio.
 Duraflex—Stokers. Canton Stoker Corp., Canton, Ohio.
 Dura-Flex—Directional Flow Registers. Auer Register Co., Cleveland, Ohio.
 Dura-Line—Registers. Auer Register Co., Cleveland, Ohio.
 Duranite—Paint. Atlas Powder Co., North Chicago, Ill.
 Duridine—Chemical Cleaner. American Chemical Paint Co., Ambler, Pa.

Duroblade—Duct Damper Regulators. Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
 Duroglas—Gas Water Heaters. General Water Heater Corp., Burbank, Calif.
 Durolite—Insulation. Insulite Div., Minnesota and Ontario Paper Co., Minneapolis, Minn.
 Duronze—Plates and Sheets. Bridgeport Brass Co., Bridgeport, Conn.
 Dust Arrester—Blowpipe Collectors. American Air Filter Co., Inc., Louisville, Ky.
 Dustay—Throwaway Air Filters. Air-Maze Corp., Cleveland, Ohio.
 Dust Kop—Dust Collectors. Agat-Detroit Co., Ann Arbor, Mich.
 DustRid—Dust Recovery Bags. Master-Craft Supply Co., Inc., Haverstraw, N. Y.
 Dustronic—Electrical Air Cleaners. Radex Corp., Chicago, Ill.
 DustStop—Filters. Owens-Corning Fiberglas Corp., Toledo, Ohio.
 Dutch Boy—Paints, Solder. National Lead Co., New York, N. Y.
 Dux-Sulation—Duct Insulation. Grant Wilson, Inc., Chicago, Ill.
 Dycon—Filters. Continental Air Filters, Inc., Louisville, Ky.
 Dynafan—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
 Dynaflow—Fans. South Bend Air Products, Inc., South Bend, Ind.
 Dyna-Flash—Electric Drills. Milwaukee Electric Tool Corp., Milwaukee, Wis.
 Dyna Line—Electric Motors. Brown-Brockmeyer Co., Inc., Dayton, O.
 Dyne-Aire—Direct Fired Heaters. American Foundry & Furnace Co., Bloomington, Ill.
 Dynetric—Balancing Equipment. Gisholt Machine Co., Madison, Wis.
 Dynoid—Controls. Soreng Mfg. Co., Schiller Park, Ill.

E

Eagle Super "66"—Furnace Insulation. Eagle-Picher Co., Cincinnati, Ohio.
 Eagle Super temp—Duct Insulation. Eagle-Picher Co., Cincinnati, Ohio.
 Easternoil—Oil Burners. Eastern Oil & Equipment Co., Portland, Me.
 Easy-Flo—Solder. Handy & Harman, New York, N. Y.
 Easy-Mold—Non-Metallic Duct. Round Tube and Cores Co., Chicago, Ill.
 Easy-Slip—Gutters. La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis.
 Ecco—Diffusers. Air-Factors, Inc., Monrovia, Calif.
 E. C. Cord—V-Belts. Goodyear Tire & Rubber Co., Inc., Akron, Ohio.
 EC&M—Controls. Electric Controller & Mfg. Co., Cleveland, O.
 Echo—Ceiling Ventilators. Elgo Shutter & Mfg. Co., Detroit, Mich.
 Echo—Fuel Oil Tank Gages. A. B. Carlson Co., Inc., Aurora, Ill.
 Eclipse—Refrigerating Compressors. Frick Co., Waynesboro, Pa.
 Econo-miser—Oil Burners. Green Colonial Furnace Co., Des Moines, Iowa.
 Economite—Gas Burners. Mid-Continent Metal Products Co., Chicago, Ill.
 Economizer—Heat Recoverers. Norse Boiler Co., New Market, N. J.
 Economy—Power Hack Saws. F. L. Robertson, Buffalo, N. Y.
 Economy—Incinerators. Comstock-Castle Stove Co., Quincy, Ill.
 Economy—Furnaces. International Heater Co., Utica, N. Y.
 Economy—Adjustable Buffing Hoods. Kirk & Blum Mfg. Co., Cincinnati, Ohio.

Economy—Ventilators. Arex Company, Chicago, Ill.
Economy—Squaring Shears. Acme Equipment Co., Inc., Chicago, Ill.
Economy—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.
Edge-Master—Sheet Metal Working Machines. Engel Sheet Metal Equipment, Inc., St. Louis, Mo.
Edgeseal—Filters. Wilson & Co., Inc., Chicago, Ill.
Effico—Ventilators. Hirschman-Pohle Co., LeRoy, N. Y.
Effico Louver—Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.
EFM—Burners, Furnaces, and Stokers. Electric Furnace-Man, Inc., Emmaus, Pa.
Eiermann—Roofers' Tools. Eisco Products Co., Syracuse, N.Y.
Elastic—Roof Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.
Elastikote—Paint. Tropical Paint Co., Cleveland, Ohio.
Elasto-Rib—Vibration Isolating Pads. Korfund Co., Inc., Long Island City, N. Y.
El Capitan—Water Heaters. Southwestern Heater Corp., Dallas, Texas
Elcon—Stationary Louvers. Elgo Shutter & Mfg. Co., Detroit, Mich.
Electric City—Gutter Forming Machines. F. L. Robertson, Buffalo, N. Y.
Electric Janitor—Draft Damper Motors, Hand Fired Control Systems. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Electricmatic—Solenoid Valves. Jas. P. Marsh Corp., Skokie, Ill.
Electro-Cell—Filters. American Air Filter Co., Inc., Louisville, Ky.
Electrofil—Solenoid Valves. Hays Mfg. Co., Erie, Pa.
Electro-Flux-Stik—Soldering Flux. Lake Chemical Co., Chicago, Ill.
Electro Hot—Water Heaters. Red Spot Electric Co., Tacoma, Wash.
Electrolaire—Air Conditioning Furnaces. Electrol Burner Mfg. Co., Rutherford, N. J.
Electro-Matic—Filters. American Air Filter Co., Inc., Louisville, Ky.
Electromaze—Electrical Air Cleaners. Air-Maze Corp., Cleveland, Ohio.
Electro-Mist—Dust Collectors. American Air Filter Co., Inc., Louisville, Ky.
Electro-PL—Filters. American Air Filter Co., Louisville, Ky.
Electro-Sheet—Roofing. American Brass Co., Waterbury, Conn.
Electro-Staynew—Electrical Air Cleaners. Dollinger Corp., Rochester, N. Y.
Electro-Valve—Solenoid Valves. Sciaky Bros., Inc., Chicago, Ill.
Electro-Wind—Ventilators. Allen Cooler & Ventilator Inc., Rochester, Mich.
Electrunite—Tubing. Steel & Tubes Div., Republic Steel Corp., Cleveland, Ohio.
Elgin—Louvers and Shutters. Elgo Shutter & Mfg. Co., Detroit, Mich.
EM—Motors. Electric Machinery Mfg. Co., Minneapolis, Minn.
EMC—Electric Motors. Howard Industries, Inc., Racine, Wis.
Empire—Mallets. Greene, Tweed & Co., North Wales, Pa.
Empire—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.
Enamelclad—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Enduro—Stainless Steel Sheets. Republic Steel Corp., Cleveland, Ohio.
Epc—Perforated Metals. Erdle Perforating Co., Rochester, N. Y.
Epoxite—Caulking Compounds. Smooth-on Mfg. Co., Jersey City, N. J.

Era—Furnaces. Excelsior Steel Furnace Co., Chicago, Ill.
Era Exl-Air—Furnaces. Excelsior Steel Furnace Co., Chicago, Ill.
Eroduct—Insulation. Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Esco—Smoke Pipe Dampers, Furnace Repair Parts. Eselgroth & Co., Newark, N. J.
Esso—Furnaces, Oil Burners. Gilbert & Barker Mfg. Co., West Springfield, Mass.
Eternit—Non-Metallic Sheets. Ruberoid Co., New York, N. Y.
Eternium—Paint. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Eutec Arc—Arc Welders. Eutectic Welding Alloys Corp., Flushing, N. Y.
EutecRods—Welding Rods. Eutectic Welding Alloys Corp., Flushing, N. Y.
Eutec Torch—Torches. Eutectic Welding Alloys Corp., Flushing, N. Y.
Eutector—Flux. Eutectic Welding Alloys Corp., Flushing, N. Y.
EutecTrodes—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N.Y.
Evaco—Barometric Draft Controls. Empire Ventilation Equipment Co., Long Island City, N. Y.
Even-Temp—Furnaces. Northwest Metal Products, Inc., Seattle, Wash.
Everdur—Plates, Sheets, Welding Rod. American Brass Co., Waterbury, Conn.
Everedy—Oil Burners. Mt. Hawley Mfg. Co., Peoria, Ill.
Everglas—Water Heaters. Hotstream Heater Co., Cleveland, O.
Everjet—Roofing Paint. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Everlasting—Fastenings. H. M. Harper Co., Morton Grove, Ill.
Exhaustalyzer—CO₂ Analyzers. Chas. Engelhard, Inc., East Newark, N. J.
Exhaustmaster—Roof Ventilators. E. Van Noorden Co., Boston, Mass.
Exidust—Dust Collectors. Allen Billmyre Div., Lamson Corp., Syracuse, N. Y.
Ex-Lite—Tin Plate Steel Sheets. Republic Steel Corp., Cleveland, Ohio.
Expand-R-Strap—Insulation Fastenings. A. J. Gerrard & Co., Melrose Park, Ill.
E-Z—Soot Remover. Norman Chemical Co., St. Paul, Minn.
E-Z—Power Hack Saws. Merchandising and Mfg. Associates, Inc., Lancaster, Pa.
E-Z Arc—Arc Welders. Will-Weld Mfg. Co., Omaha, Neb.
E-Z Dux—Duct Connections. St. Clair Rubber Co., Marysville, Mich.
E-Z-Hung—Eaves Trough and Gutters. Riggins Metal Products, Inc., Lansing, Mich.
E-Z-On—Damper Clips and Tips, Damper Regulators. M. A. Gerett Corp., Milwaukee, Wis.
EZ Wash—Air Filters. Continental Air Filters, Inc., Louisville, Ky.

F

Fabricote—Waterproofing. Wasco Products, Inc., Cambridge, Mass.
Fabri-Flex—Vibration Isolating Bases and Pads. Vibration Mountings, Inc., Elmhurst, N. Y.
Fabrikated—Faces, Grilles, Registers. Independent Register Co., Cleveland, Ohio.
Fairweather—Blower-Washer Units. Furlo Co., Hermansville, Mich.
Falco—Sheets. Fairmont Aluminum Co., Fairmont, W. Va.

Fan-Air—Gas Burners. Mettler Co., Inc., Los Angeles, Calif.
Fan-Air—Baseboard Diffusers. Premier Furnace Co., Dowagiac, Mich.
Far-Air—Evaporative Coolers, Filters. Farr Co., Los Angeles, Calif.
Farco—Soldering Flux. Farrelloy Co., Inc., Philadelphia, Pa.
Fargail—Soldering Flux. Farrelloy Co., Philadelphia, Pa.
Farsol—Soldering Flux. Farrelloy Co., Inc., Philadelphia, Pa.
FaucetHot—Water Heaters. Bastian-Morley Co., Inc., La Porte, Ind.
F & E—Underfeed Stokers. Flynn & Emrich Co., Baltimore, Md.
Featherfin—Coils. L. J. Wing Mfg. Co., Linden, N. J.
Federal—Oil Filters. Tool Industries, Inc., Detroit, Mich.
Federal—Refractories. United States Stoneware Co., New York, N.Y.
F Electric—Fan Roof Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.
Feltex—Roofing Felt. Philip Carey Co., Cincinnati, Ohio.
Felt-Grip—Vibration Isolating Bases and Pads. Vibration Mountings, Inc., Elmhurst, N. Y.
Fenestra—Windows. Detroit Steel Products Co., Detroit, Mich.
Fenn's Rotary—Roof Ventilators. Waverly Heating Supply Co., Boston, Mass.
Ferro—Soldering Flux. Linde Air Products Co., New York, N. Y.
Ferrobord—Steel Roofing. Truscon Steel Div., Republic Steel Corp., Youngstown, O.
Ferro-Therm—Reflective Insulation. American Flange & Mfg. Co., Inc., New York, N. Y.
Fibercote—Roofing Paint. Midland Paint & Varnish Co., Cleveland, Ohio.
Fiberflex—Asbestos Paper. Philip Carey Mfg. Co., Cincinnati, O.
Fiberglass—Insulation, Non-Metallic Duct. Owens-Corning Fiberglas Corp., Toledo, Ohio.
Fiberkote—Roofing Cement. National Mfg. Corp., Tonawanda, N. Y.
Fiberlite—Insulation. Insulite Div., Minnesota and Ontario Paper Co., Minneapolis, Minn.
Fiberock—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.
Fiber Seal—Paint. Midland Paint & Varnish Co., Cleveland, O.
Fiber Self Seal—Air Filters. Research Products Corp., Madison, Wis.
Fibre Coating—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Fibronized—Plastic Tubing. Irvington Varnish & Insulator Co., Irvington, N. J.
Fil-O-Matic—Fuel Oil Tank Gages. Kresno-Stamm Mfg. Co., Palisades Park, N. J.
Fil-thru—Oil Tank Gauge. Applied Mechanics Co., Boston, Mass.
Filtered Aire—Blower-Filters. American Foundry & Furnace Co., Bloomington, Ill.
Filterpure—Coils. Betz Corp., Hammond, Ind.
Filtr-Aire—Electrostatic Filters. Peden Equipment Co., Houston, Tex.
Fin-Flex—Directional Flow Registers. Auer Register Co., Cleveland, Ohio.
Finger-Strap—Insulation Fastenings. Gerrard & Co., A. J., Melrose Park, Ill.
Fire Ball—Gas Burners. Johnson Gas Appliance Co., Cedar Rapids, Iowa.
Firebox—Combustion Chambers. Sid Harvey, Inc., Valley Stream, N. Y.
Fire-Crest—Conversion Burners. Modern Controls Corp., Centerline, Mich.

Firecrete—Refractories. Johns-Manville, New York, N. Y.
Fire-Hearth—Castable Refractories. Fireline Stove & Furnace Lining Co., Chicago, Ill.
Fireite—Cement. Johns-Manville, New York, N. Y.
Fireline—Furnace Firepot Lining. Fireline Stove & Furnace Lining Co., Chicago, Ill.
Fireline—Refractories. Fireline Stove & Furnace Lining Co., Chicago, Ill.
Fire-Swirl—Baffles. Zeh Co., Inc., Passaic, N. J.
Fire Valve—Roof Ventilator and Fire Valve. Swartwout Co., Cleveland, O.
Fireye—Controls. Combustion Control Div., Electronics Corp. of America, Boston, Mass.
Firma—Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.
Firomatic—Fuel Oil Filters, Vent Caps, Oil Burner Fittings, Tank Gauges. Morse-Smith-Morse Co., Watertown, Mass.
Fit-Al—Saw Blades. Independent Blade Co., East Haven, Conn.
Fitrite—Gutter Accessories, Chimney Cap Frames, Skylight Lifts, Tools. David Levow, or Rival Strap Corp., New York, N. Y.
Fixite—Roof Cement. National Mfg. Corp., Tonawanda, N. Y.
Fixt-Aire—Registers and Grilles. Hart & Cooley Mfg. Co., Holland, Mich.
Flame-Otrol—Controls. Wheelco Instruments Div., Barber-Colman Co., Rockford, Ill.
Flatjet—Water Nozzles. Spraying Systems Co., Bellwood, Ill.
Flarpak—Prefabricated Ducts and Fittings. Viking Mfg. Corp., Cleveland, Ohio.
Fleet Line—Electric Motors. Brown-Brockmeyer Co., Inc., Dayton, O.
Fleetweld—Welding Rod. Lincoln Electric Co., Cleveland, Ohio.
Flexarc—Arc Welders. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.
Flexcell—Bases and Pads. Celotex Corp., Chicago, Ill.
Flexflyte—Flexible Duct. Flexible Tubing Corp., Guilford, Conn.
Flexiblac—Paint. Samuel Cabot, Inc., Boston, Mass.
Flexi-Blade—Registers. Air-Factors, Inc., Monrovia, Calif.
Flexi-Duct—Duct Connections. Grant Wilson, Inc., Chicago, Ill.
Flexon—Flexible Metal Hose and Fittings. Flexonics Corp., Maywood, Ill.
Flexstone—Roofing Felt. Johns-Manville, New York, N. Y.
Flextop—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Flex-Tube—Draft Indicating Gages. F. W. Dwyer Mfg. Co., Michigan City, Ind.
Floating Air—Air Conditioning Units. Friedrich Refrigerators, Inc., San Antonio, Tex.
Flo-Co—Furnaces and Gas and Oil Burners. Floral City Heater Co., Monroe, Mich.
Flo-Master—Louvers and Shutters. Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
Flo-Par—Water Heaters. Southwestern Heater Corp., Dallas, Texas
FloRite—Air Velocity Meters. Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Florite Desiccant—Dehumidifier. Floridin Co., Tallahassee, Fla.
Flosol—Soldering Flux. American Chemical Paint Co., Ambler, Pa.
Flo-Warm—Furnaces. The Williamson Co., Cincinnati, O.

Flow-Cold—Cooling Towers. Acme Industries, Inc., Jackson, Mich.
Flowing Heat—Furnaces. Sam Daniels Mfg. Co., Inc., Hardwick, Vt.
Flow-Mizer—Cooling Towers. Acme Industries, Inc., Jackson, Mich.
Flow-Temp—Air Conditioning Units. Acme Industries, Inc., Jackson, Mich.
Flualyzer—Portable CO Analyzer. Chas. Englehard, Inc., East Newark, N. J.
Fluidaire—Air Conditioning Units. Fluid Heat Div., Anchor Post Products, Inc., Baltimore, Md.
Flux-N-Solder—Solder. Johnson Mfg. Co., Inc., Mount Vernon, Ia.
Fluxrite—Flux. National Lead Co., New York, N. Y.
Flux-Stik—Soldering Flux. Lake Chemical Co., Chicago, Ill.
Foamglas—Insulation. Pittsburgh Plate Glass Co., and Pittsburgh Corning Corp., Pittsburgh, Pa.
Forbes Amvent—Ventilators. Western Engineering & Mfg. Co., Venice, Calif.
Forbes Econovent—Ventilators. Western Engineering & Mfg. Co., Venice, Calif.
Forbes Syphonaire—Ventilators. Western Engineering & Mfg. Co., Venice, Calif.
Formula 67—Sheet Metal Paint. Babbitt Chemical Specialties Co., New Bedford, Mass.
Forsaire—Furnaces. Williams Furnace Co., Buena Park, Calif.
4-Way-Flow—Registers. United States Register Co., Battle Creek, Mich.
Fracto-Crete—Castable Refractories. Ramtite Co., Chicago, Ill.
Free Exhaust—Roof Ventilators. Burt Mfg. Co., Akron, Ohio
Free Flow—Roof Ventilators. Burt Mfg. Co., Akron, Ohio
Freeman—Gas and Oil Burners, Furnaces, Air Conditioning Units, Incinerators, Stokers. Illinois Iron & Bolt Co., Carpentersville, Ill.
Freeport—Oil Burners. Arrow Foundry Co., Freeport, Ill.
Freightmaster—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.
Freon—Refrigerants. E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.
Fresh-Air Maker—Fans. Schwitzer-Cummins Co., Indianapolis, Ind.
Fridg-A-Fire—Air Conditioning Units. Automatic Firing Corp., St. Louis, Mo.
Frost-Tite—Copper Tube Fittings. Remco, Inc., Zelenople, Pa.
Fuelatrol—Oil Burners, Furnaces and Stokers. Premium Coal & Oil Co., Cincinnati, Ohio.
Fuel Door—Gas Burner. Handley-Brown Heater Co., Jackson, Mich.
Fuel-Saver—Draft Regulator. Walker Mfg. & Sales Corp., St. Joseph, Mo.
Fueltone—Oil Tank Solvent. Ampion Corp., Long Island City, N. Y.
Fuel-tron—Fuel Oil Tank Solvents. Radiator Specialty Co., Charlotte, N. C.
Fulflo—Oil Filters. Commercial Filters Corp., Melrose, Mass.
Fulljet—Water Nozzles. Spraying Systems Co., Bellwood, Ill.
Fulscope—Control Systems. Taylor Instrument Companies, Rochester, N. Y.
Furnacestat—Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Fuseair—Diffusers. Aladdin Heating Corp., Oakland, Calif.
Fyr-Fly—Oil Burners. Breeze Corps., Inc., Newark, N. J.
Fyre-Mortar—Insulating Cement. Quigley Co., Inc., New York, N. Y.
Fyrite—CO Analyzers. Bacharach Industrial Instrument Co., Pittsburgh, Pa.

G

G-6—Paint Spray Guns. Eclipse Air Brush Co., Newark, N. J.
Galbestos—Roofing. H. H. Robertson Co., Pittsburgh, Pa.
Galongage—Oil Tank Gauge. Applied Mechanics Co., Boston, Mass.
Galva-Flux—Soldering Flux. London Chemical Co., Chicago, Ill.
Galvaprep—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.
Galv-Kote—Zinc Paint. Geo. H. Ohmer Co., Dayton, Ohio.
Galv-O-Zinc—Coating. Paint. Blue Ridge Talc Co., Inc., Henry, Va.
Gar Wood—Furnaces. Enico Products, Detroit, Mich.
Gary-Aire—Cooling Coils. M. Brucker, Inc., Chicago, Ill.
Gas-A-Fire—Gas Conversion Burners, Gas Furnaces. Automatic Firing Corporation, St. Louis, Mo.
Gasapack—Controls. A-P Controls Corp., Milwaukee, Wis.
Gasaver—Gas Burners. The Williamson Co., Cincinnati, Ohio.
Gas Economy—Furnaces. International Heater Co., Utica, N. Y.
Gas Mizer—Furnaces. Floral City Heater Co., Monroe, Mich.
Gas-O-Matic—Gas Burners & Furnaces. Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.
Gasweld—Soldering Torches, Soldering Flux, Welding Rods, Arc and Spot Welders. Liquid Carbonic Corp., Industrial Gas Div., Chicago, Ill.
GAT—Paint Spray Guns. Eclipse Air Brush Co., Newark, N. J.
G. B. C.—Blowers. General Blower Co., Inc., Philadelphia, Pa.
G/C—Controls. General Controls Co., Glendale, Calif.
G-E—Air Conditioning Units, Oil Burners, Heating and Cooling Coils, Compressors, Furnaces. General Electric Co., Bloomfield, N. J.
G-E—Controls, Soldering Coppers, Motors, Transformers, Welders. General Electric Co., Apparatus Sales Div., Schenectady, N. Y.
G-E—Germicidal Lamps. General Electric Co., Cleveland, Ohio.
Gearmotor—Electric Motors. Philadelphia Gear Works, Inc., Philadelphia, Pa.
Gemaco—Compressors. General Machinery Co., Spokane, Wash.
Gemware—Hygrometers, Psychrometers, Thermometers. G. M. Mfg. Co., New York, N. Y.
General—Water Heaters. Republic Products Co., Philadelphia, Pa.
General Giant—Furnace Vacuum Cleaners. Meyer & Sons, Inc., Skokie, Ill.
Genetron—Refrigerants. General Chemical Div., Allied Chemical & Dye Corp., New York, N. Y.
Genie-Air—Roof Ventilators. Flex-Air, Inc., Los Angeles, Calif.
Genoco—Furnaces, Water Heaters, Oil Burners. General Oil Heating Corp., West New York, N. J.
Germicidal—Sterilizing Lamp. General Electric Co., Cleveland, Ohio.
Giant—Oil Burners. Breeze Corps., Inc., Newark, N. J.
Gibraltar—Furnaces. Ma-Girl Foundry & Furnace Co., Bloomington, Ill.
Gilbarco—Furnaces, Oil & Gas Burners. Gilbert & Barker Mfg. Co., West Springfield, Mass.
Gilbert—Combustion Chambers. R. Rehm, St. Albans, N. Y.

Gilco—Water Heaters. J. L. Gillen Co., Dowagiac, Mich.
Gil Governmet—Gas Pressure Regulating Valves. Gas & Oil Industry Laboratories, Inc., Irvington, N. J.
Gilmer—V-Belts. New York Belting & Packing Co., Passaic, N. J.
Gilmer Shock Pad—Vibration Isolating Bases and Pads. New York Belting & Packing Co., Passaic, N. J.
Gil Nohum—Valves. Gas & Oil Industry Laboratories, Inc., Irvington, N. J.
Gilsalume—Paint. United Gilsonite Laboratories, Scranton, Pa.
Gilt Edge—Furnaces, Stokers. Schwab Furnace Co., Milwaukee, Wis.
Gladiator—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.
Glasfab—Roofing Felt. Lexsuo, Inc., Cleveland, Ohio.
Glasfloss—Air Filters. Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Glasteel—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.
Glazola—Caulking Compounds. Nebel Mfg. Co., Cleveland, Ohio.
Glo-Cone—Gas Burners. Geisel Mfg., Inc., Elyria, Ohio.
Glo-Fyr—Oil Burners. Breeze Corps., Inc., Newark, N. J.
Glo-Ring—Gas Burners. Lennox Industries, Inc., Marshalltown, Iowa.
Glowan—Gas Burners. J. O. Martin Co., Inc., San Francisco, Calif.
Glycolator—Air Sterilizers. Iron City Chemical & Construction Corp., Glycolator Sales & Service Div., Pittsburgh, Pa.
Glycosol—Air Sterilizers. Iron City Chemical & Construction Corp., Glycolator Sales & Service Div., Pittsburgh, Pa.
Gnome—Oil Burners. Breeze Corps., Inc., Newark, N. J.
Go-Eze—Damper Regulators. Severson Mfg. & Supply Co., Milwaukee, Wis.
Gohi—Conductor Pipe, Gutters, Fittings and Accessories. Sheet Metal Roofing. Newport Steel Corp., Newport, Ky.
Gold Bond—Insulation. National Gypsum Co., Buffalo, N. Y.
Gold Bond-Gimco—Rock Wool Products, Insulating Cement. National Gypsum Co., Buffalo, N. Y.
Gordon—Furnaces. Gas Burner Pilot Controls, Gas Unit Heaters. Roberts-Gordon Appliance Co., Buffalo, N. Y.
Gordon-Aire—Furnaces. Roberts-Gordon Appliance Co., Buffalo, N. Y.
Gordon Spreader-Flame—Gas and Gas-Oil Burners and Furnaces. Roberts-Gordon Appliance Corp., Buffalo, N. Y.
G-R—Welders. Glenn-Roberts Co., Oakland, Calif.
Gradutrol—Pneumatic Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Grand Rapids—Furnace Cleaner. Doyle Vacuum Cleaner Co., Grand Rapids, Mich.
Granodine—Coating Process. American Chemical Paint Co., Ambler, Pa.
Greaso—Metal Cleaners, Polishers and Finishers. Ampion Corp., Long Island City, N. Y.
Greastop—Filters. Air-Maze Corp., Cleveland, Ohio.
Grillometer—Direct Reading Air Velocity Meter. Detroit Air Conditioning Service Co., Inc., Nashville, Mich.
GS—Hygrometers, Psychrometers, CO₂ Analyzers. General Scientific Equipment Co., Philadelphia, Pa.
Gun-Heat—Gas Burners. Barber Mfg. Co., Cleveland, O.
Gun Mix—Refractories. Ramtite Co., Div. S. Obermayer Co., Chicago, Ill.

Gun-Ram—Refractories. Ramtite Co., Div. S. Obermayer Co., Chicago, Ill.

H

Hacker—Blowers, Furnaces. Standard Heating Equipment Co., Waterloo, Iowa.
Hair Glass—Filters. H. J. Somers, Inc., Detroit, Mich.
Halco—Furnaces. Hall-Neal Furnace Co., Indianapolis, Ind.
Hallmark—Furnaces. Heating Specialties Co., Baltimore, Md.
Hammerkraft—Paint. Hilo Varnish Corp., Everett, Mass.
Hammer-Sets—Expansion Bolts. Rawlplug Co., Inc., New York, N. Y.
Hammock—Throwaway Filters. Lennox Furnace Co., Marshalltown, Ia.
Handlead—Lead Roofing Sheets. National Lead Co., New York, N. Y.
Handnib—Punches. Heinrich Tools, Inc., Racine, Wis.
Handomatic—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N. Y.
Handy—Duct, Duct Accessories, Furnace Pipe and Fittings. F. Meyer & Bro. Co., Peoria, Ill.
Handy-Flux—Soldering Flux. Handy & Harman, New York, N. Y.
Hardlead—Lead Roofing. National Lead Co., New York, N. Y.
Hardy—Button Presses and Squeezer Tongs. Interstate Drop Forge Co., Milwaukee, Wis.
H&C—Furnace Chain, Damper Clips, Dampers, Ceiling Ventilators, and Registers and Grilles. Hart & Cooley Mfg. Co., Holland, Mich.
Hearth Crete—Refractories. Quigley Co., Inc., New York, N. Y.
Heat-Aid—Refractories. Pyrolite Products Co., Cleveland, Ohio.
Heat Chaser—Air Conditioning Units. Harvey-Hill, Inc., St. Louis, Mo.
Heatcote—Paint. Debevoise Co., Brooklyn, N. Y.
Heat Holder—Baffles. Sid Harvey, Inc., Valley Stream, N. Y.
Heat-Lock—Smoke Pipe Dampers. National Fuel Conservation Co., Inc., White Plains, N. Y.
Heat-O-Matic—Gas Burners. Liberty Combustion Corp., Syracuse, N. Y.
Heat-Pak—Oil Burners, Water Heaters. Aldrich Co., Wyoming, Ill.
Heat-Rem—Aluminum Paint. Speco, Inc., Cleveland, Ohio.
Heat-Rite—Gravity Registers. Auer Register Co., Cleveland, Ohio.
Heat Seal—Insulation. Cement. Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Heat Wagon—Portable Furnaces. Lennox Industries, Inc., Marshalltown, Ia.
Heatwave—Floor and Wall Furnaces. Southwest Mfg. Co., Aurora, Mo.
Heatwell—Gas Burners. Hastings Air Control, Inc., Omaha, Nebr.
Heat-Master—Kettles. Aeroil Products Co., Inc., South Hackensack, N. J.
Hellite—Refractories. Johns-Manville, New York, N. Y.
Helwig—Button Presses and Squeezer Tongs. Interstate Drop Forge Co., Milwaukee, Wis.
Helix—Drive Screws, Nails. Hillwood Mfg. Co., Cleveland, Ohio.
Herco—Welders, Transformers. Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
Heresite—Pipe and Fittings. Heremetal Co., Minneapolis, Minn.
Herkimer—Cleaning Compounds, Water Conditioning Compounds. City Chemical Corp., New York, N. Y.
Hestadomes—Skylights. University Fan & Blower Co., Berkeley, Calif.

Hestalites—Skylights. University Fan & Blower Co., Berkeley, Calif.
Hevy-Duty—Combustion Chambers. Insulation & Refractories Co., Williamston, N. Y.
Hex Mesh—Skylight Wire Glass. Blue Ridge Glass Corp., Kingsport, Tenn.
Hex Mesh Aklo—Skylight Wire Glass. Blue Ridge Glass Corp., Kingsport, Tenn.
Hicycle—Electric Tools. Chicago Pneumatic Tool Co., New York, N. Y.
Hi-Degree—Paint. Cheesman-Elliott Co., Inc., Brooklyn, N. Y.
Hi-Duty—Copper Tube Fittings. Imperial Brass Mfg. Co., Chicago, Ill.
Hi-Duty—Combustion Chambers. Monogram Products Co., Philadelphia, Pa.
Hi-Ex—Fans and Roof Ventilators. Penn Ventilator Co., Philadelphia, Pa.
High-Duty—Humidifier Valves. Maid-O'-Mist, Inc., Chicago, Ill.
High-Ten-No. 500—Flux. Industrial Service Laboratories, Milwaukee, Wis.
Hi-Man—Alloy Plates. Inland Steel Co., Chicago, Ill.
Hi-Rate—Gas Water Heaters. General Water Heater Corp., Burbank, Calif.
Hi-Speed—Electric Dipmer. York Electric Tool Co., York, Pa.
Hi-Speed—Nibblers, Slitters, Shears. Libert Machine Co., Green Bay, Wis.
Hi-Speed—Welding and Cutting Apparatus. Dockson Corp., Detroit, Mich.
Hi-Steel—Plates. Inland Steel Co., Chicago, Ill.
H&K—Perforated Metals. Harrington & King Perforating Co., Chicago, Ill.
H-M—Gas Pressure Regulating Valves. Thermac Co., Los Angeles, Calif.
Hoffman—Water Heaters. Clayton & Lambert Mfg. Co., Louisville, Ky.
Hold Heat—Soldering Coppers. Turner Brass Works, Sycamore, Ill.
Holegrip—Sheet Metal Fastenings. Fabricated Products Co., West Newton, Pa.
Holgun—Portable Electric Drills. Black & Decker Mfg. Co., Towson, Md.
Holly Glen—Water Heaters. Hollywood Water Heater Co., Los Angeles, Calif.
Holtite—Screws. Continental Screw Co., New Bedford, Mass.
Homco—Furnaces. Siebring Mfg. Co., George, Ia.
Home—Oil Burners. Sid Harvey, Inc., Valley Stream, N. Y.
Homeaire—Air Conditioning Units. York-Shipley, Inc., York, Pa.
Home Weathermaker—Air Conditioning Units. Carrier Corp., Syracuse, N. Y.
Honeycomb—Air Filters. Wilson & Co., Inc., Chicago, Ill.
Horneblende—Roof Cement, Paint, Waterproofing. North American Mogul Products Co., Cleveland, O.
Hornlume—Roofing Paint. A. C. Horn Co., Long Island City, N. Y.
Horn-O-Tone—Paint. A. C. Horn Co., Inc., Long Island City, N. Y.
Hot Blast—Furnace Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.
Hot-Flo—Gas Water Heaters. Hoyt Heater Co. of No. Calif., Oakland, Calif.
Hot Spot—Electric Welders. Acme Electric Welder Co., Los Angeles, Calif.
Howard—Electric Motors. Electric Motor Corp., Div. Howard Industries, Inc., Racine, Wis.
Howell—Oil Burners. Kol-Master Corp., Oregon, Ill.
Huber—Overfeed Stokers. Flynn & Emrich Co., Baltimore, Md.
Humidean—Cleaning Compound. Carolina Aniline & Extract Co., Charlotte, N. C.
Humid-Air—Evaporative Humidifiers. Hansen Tool & Die Co., Milwaukee, Wis.

Humidair—Humidifiers. Skilbeck Mfg. Co., Kenosha, Wis.
Humidigraph—Hygrometers. Bristol Co., Waterbury, Conn.
Humidiguide—Humidistats. Taylor Instrument Companies, Rochester, N.Y.
Humidomist—Nozzles. Supreme Elec. Products Corp., Rochester, N.Y.
Humidostat—Humidistats. Johnson Service Co., Milwaukee, Wis.
Hum-I-Dri—Dehumidifiers. Speco, Inc., Cleveland, O.
Humid-u-stat—Humidistat. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Humphrey—Furnaces. General Gas Light Co., Kalamazoo, Mich.
Husky—Presses and Dies. Fallsington Mfg. Co., Fallsington, Pa.
Husky-Lite—Combination Machines. Maplewood Machinery Co., Chicago, Ill.
Hydralt—Waterproofing. Flintkote Co., New York, N.Y.
Hydramotor—Gas Pressure Regulating Valves. General Controls Co., Glendale, Calif.
Hydraulic Action—Controls. White-Rodgers Electric Co., St. Louis, Mo.
Hydrocide—Waterproofing. L. Sonneborn Sons, Inc., New York, N.Y.
Hydronon—Waterproofing. Barret Div., Allied Chemical & Dye Corp., New York, N.Y.
Hydro-Whirl—Dust Collectors. Peters-Dalton, Inc., Detroit, Mich.
Hy-Duty—Blowers, Blower Wheels. Schwitzer-Cummins Co., Indianapolis, Ind.
Hygrothermograph—Humidity Recorders. Fries Instrument Div., Bendix Aviation Corp., Baltimore, Md.
Hyduty—Ventilators. Davidson Hyduty Roof Fan Co., Newton, Mass.
Hy-Power—Snips and Shears. Wiss & Sons Co., J., Newark, N.J.
Hyspar—Cements, Caulking Compounds. Roof Paints. Midland Paint & Varnish Co., Cleveland, Ohio.
Hyttempite—Furnace Cement. Quigley Co., Inc., New York, N.Y.

I

Ideal—Furnace Brushes. Worcester Brush & Scraper Co., Worcester, Mass.
Ideal—Nozzle extractor. Boston Machine Works Co., Lynn, Mass.
Ideal—Furnace Pipe and Fittings. Riggins Metal Products, Inc., Kankakee, Ill.
Ideal—Roofing Nails. Tennessee Coal and Iron Div., U. S. Steel Corp., Fairfield, Ala.
Ideal-Aire—Furnaces. American Ideal-Aire Corp., Garden City, N.Y.
Idealarc—Arc Welders. Lincoln Electric Co., Cleveland, O.
Idler—Recirculating Pumps. G & S Mfg. Co., Phoenix, Ariz.
IEC—Relays, Switches. Industrial Engineering Corp., Terre Haute, Ind.
Ilgdualgas—Gas Unit Heaters. Ilg Electric Ventilating Co., Chicago, Ill.
Ilgette—Kitchen Exhaust Fans. Ilg Electric Ventilating Co., Chicago, Ill.
Illbronze—Aluminum Paste and Powder. Illinois Bronze Powder Co., Inc., Chicago, Ill.
Immersatherm—Domestic Hot Water Control. Mercoid Corp., Chicago, Ill.
Imperial—Evaporative Coolers. International Metal Products Co., Phoenix, Ariz.
Imperial—Baseboard Diffusers. Vectaire Mfg. Co., Melrose, Mass.
Imperial—Pillow Blocks. Anti-Friction Bearings Co., Los Angeles, Calif.

Imperial—Registers. Vectaire Mfg. Co., Melrose, Mass.
Imperial Speedmaster—Gas Water Heaters. Handley-Brown Heater Co., Jackson, Mich.
Impinged Jet—Gas Burners. Barber Mfg. Co., Cleveland, O.
Inciner—Incinerators. Bowser, Inc., Incineration Div., Cairo, Ill.
Inco—Paints, Sound Deadener. Inter-Coastal Paint Co., East St. Louis, Ill.
Inco—Ventilators. Iona Ventilator Co., Inc., Philadelphia, Pa.
Inconel—Alloy Plates, Sheets, Tubing, Electrodes. International Nickel Co., Inc., New York, N.Y.
Indoor-Outdoor—Thermostats. White-Rodgers Electric Co., St. Louis, Mo.
Industrial Air—Fans, Louvers & Ventilators. Bertram Co., Harvey P., Cincinnati, Ohio.
Inertarc—Arc Welders. Lincoln Electric Co., Cleveland, O.
Ingalls—Furnace Brushes. Worcester Brush & Scraper Co., Div. Mason Worcester Co., Worcester, Mass.
Ingels—Elbow Machines. Maplewood Machinery Co., Chicago, Ill.
In-Quik—Combustion Chambers. Insulation & Refractories Co., Williamson, N.Y.
INS—Brazing Torches. Lincoln Electric Co., Cleveland, O.
Insa-Lite—Insulating Cement. Sauereisen Cements Co., Pittsburgh, Pa.
Instant-Glo—Combustion Chambers. Boston Machine Works Co., Lynn, Mass.
Insulsag—Insulation and Insulating Cement. Quigley Co., Inc., New York, N.Y.
Insulbrix—Refractories. Quigley Co., Inc., New York, N.Y.
Insulfil—Insulation. Refractory & Insulation Corp., New York, N.Y.
Insulkote—Waterproofing. Johns-Manville, New York, N.Y.
Insul-Lyte—Combustion Chambers and Refractories. Insulating Castable Corp., River Rouge, Mich.
Insulmat—Insulation. J. W. Mortell Co., Kankakee, Ill.
Insul-Pin—Insulation Fastenings, Welders. Graham Mfg. Corp., Royal Oak, Mich.
Interlox—Hose and Fittings. International Metal Hose Co., Bellevue, O.
Inter-Matic—Time Switches, Electric Motors. International Register Co., Chicago, Ill.
International—Oil Tank Gauge. Applied Mechanics Co., Boston, Mass.
Intru-lok—Copper Tube Fittings. Parker Appliance Co., Cleveland, O.
Inversaire—Furnaces. Berger Furnace Corp., Belle Vernon, Pa.
I.P.F.—Non-Metallic Duct. Industrial Plastic Fabricators, Inc., Norwood, Mass.
Ironhide—Paint. Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Ironweld—Cast Iron Welding Flux. Sight Feed Generator Co., West Alexandria, Ohio.
Irpo—Rust-Proofing. Wolfe-Kote Co., Sheboygan, Wis.
Island City—Registers. Rock Island Register Co., Rock Island, Ill.
Isomode—Vibration Pads. MB Mfg. Co., Div. of Textron American, Inc., New Haven, Conn.
IVCO—Ventilators. Iona Ventilator Co., Inc., Philadelphia, Pa.

J

Janette—Blower Wheels and Housings. Jan-Air, Inc., Richmond, Ill.

Janitrol—Gas Burners, Air Conditioning Units, Furnaces. Surface Combustion Corp., Toledo, Ohio.
J & C—Blower-Filter Units and Furnaces. Jackson & Church Co., Saginaw, Mich.
JE—Solenoid Valves. Jackes-Evans Mfg. Co., St. Louis, Mo.
Jet-8—Gas Burners. Banner Burner Co., Youngstown, O.
Jetglas—Furnaces. Payne Furnace Div., Affiliated Gas Equipment, Inc., Monrovia, Calif.
Jetglas—Gas Unit Heaters. Day & Night Div., Carrier Corp., Monrovia, Calif.
Jethard—Welding Rod. Lincoln Electric Co., Cleveland, O.
Jet-O-Lator—Roof Ventilators. Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
Jetweld—Welding Rod. Lincoln Electric Co., Cleveland, O.
J. & H.—Electric Motors. Jack & Heintz, Inc., Cleveland, Ohio.
Jiffy—Roof Flashing. Simplex Mfg. Co., Fond du Lac, Wis.
Jiffy—Dampers. Duro-Dyne Corp., New Hyde Park, L. I., N.Y.
JK—Bar Benders. James Knights Co., Sandwich, Ill.
J-M—Insulation, Roofing, Curtain Wall Panels. Johns-Manville, New York.
Jointite—Insulation. Mundet Cork Corp., North Bergen, N.J.
Jumbo—Oil Burners. Breeze Corps., Inc., Newark, N.J.
June-Aire—Furnaces. American Foundry & Furnace Co., Bloomington, Ill.
JusRite—Ducts, Dampers, Duct Connectors, Furnace Pipe and Fittings. Corbman Bros., Inc., Philadelphia, Pa.
JusRite L-Bo—Furnace Pipe and Fittings. Corbman Bros., Inc., Philadelphia, Pa.

K

Kant Krush—Roof Strainers. Grand Rapids Wire Products Co., Grand Rapids, Mich.
Kapco—Asphalt Board. Keystone Asphalt Products Co., Chicago, Ill.
Kathabar—Air Conditioning Units. Dehumidifiers. Surface Combustion Corp., Toledo, Ohio.
Kaukit—Caulking Compound. L. Sonneborn Sons, Inc., New York, N.Y.
Kay-Vee—Aluminum Awnings. Koolvent Metal Awnings Corp. of America, Pittsburgh, Pa.
Keldur—Vibration Isolators. Hobsite Products Co., Harrison, N.J.
Ken—Solvents, Baffles, Fuel Oil Tank Gauges. Robert Barclay, Inc., Chicago.
Kernerator—Incinerators. Kerner Incinerator Div., Morse-Boulger Destructor Co., New York, N.Y.
Keystone—Flashings. Revere Copper and Brass, Inc., New York, N.Y.
Keystone—Water Heaters. Bastian-Morley Co., Inc., LaPorte, Ind.
Kimsul—Insulation. Kimbly-Clark Corp., Neenah, Wis.
King Gauge—Tank Gauge. Oil Equipment Mfg. Co., New Haven, Conn.
Kirksite—Zinc Sheets. Morris P. Kirk & Son, Inc., Los Angeles, Calif.
Kirkson—Flux, Solder. Morris P. Kirk & Son, Los Angeles, Calif.
Kitchen-Aire—Ventilating Hoods, Kitchen Fans. Stewart Industries, Inc., Indianapolis, Ind.
Kitch-N-Ventor—Fans. Universal Blower Co., Birmingham, Mich.
Kleen-Aire—Furnaces. Steel City Furnace Co., Springdale, Pa.
Kleenflo—Filters. Air-Maze Corp. Cleveland, Ohio.

Kleenit—Oil Burner Tank Solvent, Soot Remover. Red Wing Oil Burner Co., Inc., Medford, Mass.

Kleenmaster—Furnace Vacuum Cleaners. Molloy Sales Corp., Chicago, Ill.

Klenk's—Snips. W. H. Compton Shear Co., Newark, N. J.

Klixon—Controls, Thermostats. Spencer Thermostat Div., Metals & Controls Corp., Attleboro, Mass.

Klondike—Welders. Ralph Fern, Scranton, Pa.

Klosd—Motors. Sterling Electric Motors, Inc., Los Angeles, Calif.

K-Louver—Sun Reflecting Louvers. Kawneer Co., Niles, Mich.

K&M—Insulation. Keasbey & Mattison Co., Ambler, Pa.

Knock-Out—Arc Welders, Torches, Buffers, Grinders, Polishers and Sanders. K. O. Lee Co., Aberdeen, S. D.

Kno-Draft—High Velocity Air Diffusers. Connor Engineering Corp., Danbury, Conn.

KO—Hoists. Stephens-Adamson Mfg. Co., Aurora, Ill.

Kolbkast—Combustion Chambers. Kolb Refractories Co., Philadelphia, Pa.

Kolbkast—Combustion Chambers. A. R. Webber Co., Inc., New Haven, Conn.

Kolstoker—Stokers. Anchor Stove & Range Co., New Albany, Ind.

Kompo-Kork—Vibration Isolating Pads. Korfund Co., Inc., Long Island City, N. Y.

Kooler-Aire—Air Conditioning Units. United States Air Conditioning Corp., Minneapolis, Minn.

Kooler-Kote—Sheet Metal Paint. Petroleum Chemicals, Inc., Fresno, Calif.

Koolmaster—Fans. Air Equipment Co., Inc., Chicago, Ill.

Kool-Pak—Air Conditioning Units. Midwest Automatic Control Co., Des Moines, Iowa.

Koolshade—Sun Reflecting Screens and Louvers. Reflectal Corp., Subsidiary Borg-Warner Corp., Chicago, Ill.

Kool-Temp—Air Conditioning Units. Midwest Automatic Control Co., Des Moines, Iowa.

Koppax—Paint. Koppers Co., Inc., Pittsburgh, Pa.

Kopro-C.P.-15—Roof Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.

Korner King—Portable Power Saw. RCS Tool Corp., Joliet, Ill.

Kres-Kno Perco-Flash—Water Heaters. Kresno-Stamm Co., New York, N. Y.

Krome-Kote—Metal Cleaners. Wolfe-Kote Co., Sheboygan, Wis.

Kruzite—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

KRW—Press Brake. K. R. Wilson, Inc., Arcade, N. Y.

Kurlicue—Aluminum Nails. Independent Nail & Packing Co., Bridgewater, Mass.

Kwikflo Flux—Soldering Flux. London Chemical Co., Melrose Park, Ill.

Kwik-Melter—Roofers' Kettles. Littleford Bros., Inc., Cincinnati, Ohio.

Kwik-Tite—Copper Tube Fittings. Imperial Brass Mfg. Co., Chicago, Ill.

Kwik-Way—Damper Regulators. Hart & Cooley Mfg. Co., Holland, Mich.

KX-99—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

L

LA—Motors. Louis Allis Co., Milwaukee, Wis.

La-Co—Soldering Flux. Lake Chemical Co., Chicago, Ill.

Lac-O-Nu—Metal Cleaner. NuSteel Co., Chicago, Ill.

Lacq—Lacquers. Glidden Company, Cleveland, Ohio.

Lactile—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.

Lagz—Insulation Adhesive. West Chester Chemical Co., West Chester, Pa.

Lamneck—Ducts and Duct Accessories, Water Heaters, Furnace Pipe and Fittings. Clayton & Lambert Mfg. Co., Louisville, Ky.

Lancel—Stainless Steel Soldering Flux. F. H. Langsenkamp Co., Indianapolis, Ind.

Larco—Asbestos Paper Paste. Western Mineral Products Co., Minneapolis, Minn.

Lastile—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.

L-Blow—Exhausters, Ventilators. Trade-Wind Motorfans, Inc., Rivera, Calif.

Leader—Water Heaters. Day & Night Div., Carrier Corp., Monrovia, Calif.

Lead-Head—Nails. W. H. Maze Co., Peru, Ill.

Lead-Seal—Roofing Nails. The Deniston Co., Chicago, Ill.

Leadtex—Lead-Coated Sheets. Revere Copper & Brass Inc., New York, N. Y.

Leastoker—Stokers. H. Leslie Leas Co., Monona, Iowa.

Lectrodryer—Dehumidifier. Pittsburgh Lectrodryer Corp., Pittsburgh, Pa.

Leigh—Shutters, Awnings, Canopies, Ventilators. Air Control Products, Inc., Coopersville, Mich.

Levelizer—Gas Controls. Mueller Climatrol, Milwaukee, Wis.

Levelometer—Oil Tank Gauges. Liquidometer Corp., Long Island City, N. Y.

Liberty—Furnaces. Dowagiac Steel Furnace Co., Dowagiac, Mich.

Liberty—Caulking Compound, Roof Cement, Paint, Waterproofing. Carter Paint Co., Liberty, Ind.

Liberty—Ventilators. Penn Ventilator Co., Philadelphia, Pa.

Lifeline "A"—Motors. Westinghouse Electric Corp., Pittsburgh, Pa.

Lifetime—Roofing, Sheets, Conductor Pipe and Fittings, Tubing, Angles, Bars, Beams, Channels and Tees. Reynolds Metals Co., Louisville, Ky.

Lift King—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.

Light Duty—V-Belts. B. F. Goodrich Co., Akron, Ohio.

Lightening Hole—Punches. Merchandising and Manufacturing Associates, Inc., Lancaster, Pa.

Lincoln—Air Conditioning Units. Forston Co., Houston, Tex.

Lincolnweld—Arc Welders. The Lincoln Electric Co., Cleveland, Ohio.

Lincwelder—Arc Welders. Lincoln Electric Co., Cleveland, Ohio.

Line-O-Flo—Diffusers, Ventilators. Barber-Colman Co., Rockford, Ill.

Liquid Wrench—Rust Preventive Chemicals. Radiator Specialty Co., Charlotte, N.C.

Lite-Cast—Combustion Chambers. Monogram Products Co., Philadelphia, Pa.

Lithoform—Coating Chemical for Galvanized, Zinc or Cadmium surfaces. American Chemical Paint Co., Ambler, Pa.

Little Blacksmith—Punches and Slitting Machines. J. F. Kidder Mfg. Co., Inc., Burlington, Vt.

Little Gem—Gas Burner. Columbia Burner Co., Toledo, Ohio.

Liv-Air—Furnaces. Livingston, Inc., Marshall, Mich.

LJ-1—Brazing Torches. Lincoln Electric Co., Cleveland, O.

Lloyd's—Soldering Flux. Johnson Mfg. Co., Inc., Mount Vernon, Iowa.

L-M—Tubing. Lewin-Mathes Co., St. Louis, Mo.

L & N—Thermometers. Leeds & Northrup Co., Philadelphia, Pa.

Load King—Hand and Electric Hoists. Yale & Towne Mfg. Co., Philadelphia, Pa.

Lo-Blast—Gas Burners. Mid-Continental Metal Products Co., Chicago, Ill.

Lo-Boy—Stokers. Whiting Corp., Harvey, Ill.

Lock-Joint—Duct and Duct Accessories. Inland Steel Products Co., Milwaukee, Wis.

Lock-Seam—Blow Pipe Fittings. Chicago Metal Mfg. Co., Chicago, Ill.

Lockaire—Building Insulation. Plastergon Wall Board Co., Buffalo, N. Y.

Lodestar—Hoists. Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Tonawanda, N. Y.

Lo-Hed—Electric Hoists. American Engineering Co., Philadelphia, Pa.

Lo-K—Building and Duct Insulation. Lockport Mills, Inc., Lockport, N. Y.

Lok-Joint—Building Insulation. Insulite Div., Minnesota & Ontario Paper Co., Minneapolis, Minn.

Lone Star—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

Longhorn—Water Heaters. Hotstream Heater Co., Cleveland, Ohio.

Loop-the-Loop—Snow Guards. Danzer Metal Works Co., Hagerstown, Md.

Lo-Pilot—Water Heaters. Allen Mfg. Co., Inc., Nashville, Tenn.

Lo-Set—Stokers. Canton Stoker Corp., Canton, Ohio.

Lovejoy-Ideal—V-belts. Lovejoy Flexible Coupling Co., Chicago, Ill.

Lown—Slip Roll Forming Machines. San Angelo Foundry & Machinery Co., San Angelo, Tex.

Low Type—Roof Ventilators. Burt Mfg. Co., Akron, Ohio.

L-U—Gravity Roof Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.

Luco—Acid Brushes, Flux, Solder. Thos. F. Lukens Metal Co., Philadelphia, Pa.

Lumaskin—Building Insulation. Angier Corp., Framingham, Mass.

Lume-Tex—Aluminum Paint. Truscon Laboratories, Detroit, Mich.

Luminous Flame—Gas Burners. Zink Co., John, Tulsa, Okla.

Lumishade—Awnings, Canopies. Mapes Industries, Inc., Lincoln, Nebr.

Lusterlite—Insulation. Insulite Div., Minnesota & Ontario Paper Co., Minneapolis, Minn.

Lustralumin—Aluminum Paint. Blue Ridge Talc Co., Inc., Henry, Va.

Luxaire—Blower-Filter Units, Burners, Furnaces, Furnace Pipe and Fittings, Incinerators. The C. A. Olsen Mfg. Co., Elyria, Ohio.

Luxor—Sheet Metal Awnings. Chamberlin Co. of America, Detroit, Mich.

Lyfanite—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.

Lyonore—Sheets. Lyon-Conklin & Co., Inc., Baltimore, Md.

Lyston—Soldering Flux. Farrelloy Co., Inc., Philadelphia, Pa.

Lytestone—Soldering Flux, Tinning Baths. Farrelloy Co., Inc., Philadelphia, Pa.

M

Macheta—Fans, Fan Blades, Ventilators. Aerovent Fan Co., Piqua, Ohio.

Magic Dial—Control Systems. Midwest Automatic Control Co., Des Moines, Iowa.

Magic Dial—Thermostats. Perfex Corp., Milwaukee, Wis.

Magnehelic—Draft Indicating Gages. F. W. Dwyer Mfg. Co., Michigan City, Ind.

Mauliner—Fan Blades. Alan E. Burden Co., Los Angeles, Calif.

Majestic—Flashing, Skylights, Ventilators. Fingles Co., Baltimore, Md.

Mamco—Electric Motors. Master Appliance Mfg. Co., Racine, Wis.

Marco—Propeller Fans. Marvin Mfg. Co., Los Angeles, Calif.

Marcolite—Skylights and Roof Ventilators. Marco Co., East Orange, N. J.

Marietta—Enamels and Lacquers. American-Marietta Co., Chicago, Ill.

Mark Time—Time Switches. M. H. Rhodes, Inc., Hartford, Conn.

Mars—Furnaces. Pacific Gas Heating Co., San Francisco, Calif.

Marsalis Chubby—Floor Furnace. American Metal Products Co., Fort Worth, Texas.

Martha Washington—Water Heaters, Ventilating Hoods. Gray & Dudley Co., Nashville, Tenn.

Martin—Furnaces, Incinerators. King Stove and Range Co., Sheffield, Ala.

Marvel—Water Heaters. Bastian-Morley Co., Inc., La Porte, Ind.

Mary-Mac—Storage Water Heaters. McDaniel Mfg. Co., Inc., Dallas, Texas.

Massachusetts—Air Conditioning Units, Blowers, Blower Wheels, Fans. Bishop & Babcock Mfg. Co., Cleveland, Ohio.

Master—Circles, Hangers and Fittings. Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.

Master—Evaporative Coolers. Essick Mfg. Co., Los Angeles, Calif.

Master Blower—Thermostatic Hydraulic Control. White Mfg. Co., St. Paul, Minn.

Master Kraft—Coils, Oil Burners, Furnaces. Harvey-Whipple, Inc., Springfield, Mass.

Master Vac—Furnace Vacuum Cleaners. Premier Co., St. Paul, Minn.

Mastic Board—Insulation. Keystone Asphalt Products Co., Chicago, Ill.

Maxaw—Electric saws. John Oster Mfg. Co., Milwaukee, Wis.

Maxdrills—Electric Drills. John Oster Mfg. Co., Milwaukee, Wis.

Mayari—Nickel-Chromium Sheets and Plates. Bethlehem Steel Co., Bethlehem, Pa.

Mayfair—Air Conditioning Units. American Radiator & Standard Sanitary Corp., Air Conditioning Div., New York, N. Y.

McKee—Gas Burners. Eclipse Fuel Engineering Co., Rockford, Ill.

M. E.—Motors. Marathon Electric Mfg. Corp., Wausau, Wis.

Mecco—Doors and Shutters, Skylights, Ventilators. Moeschel-Edwards Co., Inc., Cincinnati, Ohio.

Meco—Torches. Modern Engineering Co., St. Louis, Mo.

Meco Jiffy—Soldering Torches. Modern Engineering Co., St. Louis, Mo.

Meletron—Controls. Barksdale Valves, Los Angeles, Calif.

Merion—Water Heaters. John Wood Co., Conshohocken, Pa.

Metalbestos—Chimney Caps, Pipe and Fittings. William Wallace Co., Belmont, Calif.

Metalleaf—Aluminum Paint. Pittsburgh Plate Glass Co., Pittsburgh, Pa.

Metal-Fab—Flexible Duct Connections. Duro-Dyne Corp., New Hyde Park, L. I., N. Y.

Metallite—Paints. Glidden Co., Cleveland, Ohio.

Metal-Master—Snips and Shears. J. Wiss & Sons Co., Newark, N. J.

Metalprep—Rust Preventative Chemicals. Neilson Chemical Co., Detroit, Mich.

Metalset—Caulking Compounds. Smooth-on Mfg. Co., Jersey City, N. J.

Metal Zipper—Arc Welders. Mid-States Welder Mfg. Co., Chicago, Ill.

Meteor—Hoists. Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Tonawanda, N. Y.

Met-L-Flex—Vibration Isolating Bases and Pads. Robinson Aviation, Inc., Teterboro, N. J.

MetroDeck—Steel Roofing. Goldsmith Metal Lath Co., Cincinnati, Ohio.

Metropac—Oil Burners and Gas Furnaces. Metromatic Mfg. Co., Medford, Mass.

Metropolitan—Baseboard Diffusers, Registers. Vectaire Mfg. Co., Melrose, Mass.

Mex-Ko—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

Meyco—Furnaces. Meyer Furnace Co., Peoria, Ill.

MGO Combination—Gas-Oil Burners. Mettler Co., Inc., The, Los Angeles, Calif.

M-H—Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Miam-Carey—Fans. Philip Carey Mfg. Co., Cincinnati, O.

Mica-kote—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.

Microflex—Vibration Isolating Bases and Pads. L. O. F. Glass Fibers Co., Toledo, O.

Micro-Klean—Fuel Oil Filters. Cuno Engineering Corp., Meriden, Conn.

Microlite—Sound Absorbers, Duct and Furnaces Insulation. L. O. F. Glass Fibers Co., Toledo, O.

Microlock—Bearings. Shafer Bearing Div., Chain Belt Co., Downers Grove, Ill.

Micromax—Recorders. Leeds & Northrup Co., Philadelphia, Pa.

Micro-Mix—Oil Burners. Lennox Industries, Inc., Marshalltown, Iowa.

Micro Motor—Motors. Redmond Distributors, Inc., Owosso, Mich.

MicroRold—Stainless Sheets. Washington Steel Corp., Washington, Pa.

Microtherm—Thermostats. Barber-Colman Co., Rockford, Ill.

Micro-Weld—Welders. Micro Products Co., Chicago, Ill.

Midget—Humidifier Valves. Maid-O'-Mist, Inc., Chicago, Ill.

Midget King—Hoist. Yale & Towne Mfg. Co., Philadelphia, Pa.

Mighty Midget—Furnaces. Dowagiac Steel Furnace Co., Dowagiac, Mich.

Mighty Midget—Drills. Stanley Elec. Tool Div., The Stanley Works, New Britain, Conn.

Milburn—Brazing Torches. Black Mfg. Co., Harrison, N. J.

Milcor—Furnace Pipe, Roofing and Roofing Products. Inland Steel Products Co., Milwaukee, Wis.

Milwaukee—Presses and Dies. Doelger & Kirsten, Inc., Milwaukee, Wis.

Milwaukee Themoflo—Furnaces. Metzger Machine & Engineering Co., Milwaukee, Wis.

Mindicator—Thermometers. Dickson Co., Chicago, Ill.

Minicorder—Recorders. Dickson Co., Chicago, Ill.

Minit Kote—Metal Cleaner. Klem Chemicals, Inc., Detroit, Mich.

Mipatan—Electric Hammers. Gibson Industries, Muskegon, Mich.

Miracle Breeze—Evaporative Cooler Units. Arizona Maintenance Co., Tucson, Ariz.

Miracool—Air Conditioning Units. Payne Div. of Carrier Corp., Monrovia, Calif.

Mirawal—Metal Sheets. Baltimore Porcelain Steel Corp., Baltimore, Md.

Mirror—Vent Caps, Dampers, Draft Diverters, Furnace Pipe and Fittings. Mirror Patented Stove Pipe Co., Hartford, Conn.

Mix-Mor—Combustion Heads. National Fuel Conservation Co., Inc., White Plains, N. Y.

Mizzou—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

M&M—Valves. McDonnell & Miller, Inc., Chicago, Ill.

Modern—Incinerators. Modern Controls Corp., Centerline, Mich.

ModernAire—Fans, Evaporative Air Conditioning Units. National Gas Equipment Co., Inc., Denison, Texas.

Modu-aire—Air Conditioning Units. United States Air Conditioning Corp., Minneapolis, Minn.

Moduflow—Control Systems. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Modutrol—Duct Damper Motors. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Modu-Wave—Welders. Sciaky Bros., Inc., Chicago, Ill.

Mogul—Rust Preventive Chemicals, Water Conditioning Compounds, Soot Removers, Tank Solvents. North American Mogul Products Co., Cleveland, O.

Mogul Kwik-Kleen—Cleaning Compound. North American Mogul Products Co., Cleveland, O.

Moisture Magnet—Dehumidifiers. Remington Air Cond. Div., Remington Corp., Auburn, N. Y.

Moldit—Refractories. Refractory & Insulation Corp., New York, N. Y.

Monar—Welding Rod. Arcos Corp., Philadelphia, Pa.

Moncrief—Blower-Filter Units, Furnaces, Burners, Duct, Grilles, Unit Heaters, Pipe and Fittings, Air Conditioning Units, Incinerators. Henry Furnace Co., Medina, Ohio.

Monel—Sheets, Plate and Tubing, Electrodes. International Nickel Co., New York, N. Y.

Monend—Welding Rod. Arcos Corp., Philadelphia, Pa.

Monite—Humidifier Plates. Cleveland Humidifier Co., Cleveland, O.

Monmouth—Humidifiers. Cleveland Humidifier Co., Cleveland, Ohio.

Mono-Block—Furnace Insulation. Baldwin Hill Co., Trenton, N. J.

Monogram—Furnaces. Quincy Stove Mfg. Co., Quincy, Ill.

Monogram—Combustion Chambers. Grant Wilson, Inc., Chicago, Ill.

Monolinc—Refractories. Quigley Co., Inc., New York, N. Y.

Mono Motor—Electric Motors. Redmond Distributors, Inc., Owosso, Mich.

Monoport—Gas Burners. Modern Controls Corp., Centerline, Mich.

Monovent—Roof Ventilators. Burt Mfg. Co., Akron, Ohio.

Morflex—Flexible Couplings. Morse Chain Co., Ithaca, N. Y.

Morlex—Rust Preventives. Carbide and Carbon Chemicals Co., Div. Union Carbide and Carbon Corp., New York, N. Y.

Morse Cyclone—Blow Pipe Collectors. Goergen-Mackwirth Co., Inc., Buffalo, N. Y.

Mor-Sun—Oil Burners, Furnaces, Air Conditioning Units. Morrison Steel Products, Inc., Buffalo, N. Y.

Mortex—Metal Protective Coatings. J. W. Mortell Co., Kankakee, Ill.

Mortite—Caulking and Glazing Compounds. J. W. Mortell Co., Kankakee, Ill.

Motorized Draft-O-Stat—Controls. Hotstream Heater Co., Cleveland, Ohio.

Motorstoker—Stokers and Furnaces. Hershey Machine & Foundry Co., Mannheim, Pa.

Mototurb—Ventilators. Uno Ventilator Co., Malden, Mass.

Moyno—Pumps. Robbins & Myers, Inc., Springfield, Ohio.

M-Pel-Air—Fans, Fan Blades. Brookside Products Co., Inc., McCordsville, Ind.

M-R—Wire Glass. H. H. Robertson Co., Pittsburgh, Pa.

M & T—Arc Welders. Metal & Thermit Corp., New York, N. Y.

Muckle-Vents—Roof Ventilators. Muckle Mfg. Co., Owatonna, Minn.

Multiblade—Welding Fume Exhausters. General Blower Co., Morton Grove, Ill.

Multiclone—Blow Pipe Collectors. Western Precipitation Corp., Los Angeles, Calif.

Multi-duty—Pulleys. Gates Rubber Co., Denver, Colo.

Multi-Duty—Filters. American Air Filter Co., Inc., Louisville, Ky.

Multi-Max—Punch Presses. Diamond Machine Tool Co., Pico, Calif.

Multi-Notcher—Notching Machine. Fallington Mfg. Co., Fallington, Pa.

Multitherm—Air Conditioning Units. Clarage Fan Co., Kalamazoo, Mich.

Multi-V—Belts. B. F. Goodrich Co., Akron, Ohio.

Multivane—Blowers. Westinghouse Electric Corp., Sturtevant Div., Hyde Park, Boston, Mass.

Multi-Vent—Air Diffuser. Pyle-National Co., Multi-Vent Div., Chicago, Ill.

Murex—Welding Rod. Metal & Thermit Corp., New York, N.Y.

M/W—Filters. American Air Filter Co., Inc., Louisville, Ky.

MW-50—Insulating Cement. Philip Carey Mfg. Co., Cincinnati, O.

MW-One—Insulating Cement. Philip Carey Mfg. Co., Cincinnati, O.

Myka-Disk—Baffles. Insulation & Refractories Co., Williamson, N. Y.

N

Nairoil—Oil Burners, Combustion Chambers. National Airoil Burner Co., Philadelphia, Pa.

Nalco—Flux. National Lead Co., New York, N. Y.

NarroWall—Wall Furnaces. Holly Mfg. Co., Pasadena, Calif.

National—Blower-Filter Units, Furnaces, Direct Fired Air Heaters. MaGirl Foundry & Furnace Co., Bloomington, Ill.

National—Horizontal Furnaces. Stainless & Steel Products Co., St. Paul, Minn.

National—Water Heaters. Mustee Heater Co., Cleveland, Ohio.

National Champion—Furnaces. National Heater Co., St. Paul, Minn.

Natur-Temp—Building Insulation. Barnhardt Mfg. Co., Charlotte, N. C.

Naturzone—Building and Duct Insulation. Wilson & Co., Inc., Chicago, Ill.

NCG—Soldering and Welding Flux, Welding Rods. National Cylinder Gas Co., Chicago, Ill.

Nebelastic—Roof Cement. Nebel Mfg. Co., Cleveland, Ohio.

Nebel-Kote—Paint. Nebel Mfg. Co., Cleveland, Ohio.

Nelson—Air Conditioning Units, Baseboard Diffusers, Furnaces, Stokers. Heating Assurance, Inc., Spokane, Wash.

Nelweld—Welders. Nelson Stud Welding Div., Gregory Industries, Inc., Lorain, Ohio.

Neobon—Waterproofing. Atlas Mineral Products Co., Mertztown, Pa.

Nepoxide—Waterproofing. Atlas Mineral Products Co., Mertztown, Pa.

Nev-A-Rust—Paints. Glidden Co., Cleveland, Ohio.

Never-Stain—Aluminum Nails, Roof Flashings, Aluminum Wire, Ridge Roll, Roofing. Nichols Wire & Aluminum Co., Davenport, Iowa.

New Braze—Flux. Sherman & Co., New York, N. Y.

New Departure—Oil Burners. Breeze Corps, Inc., Newark, N. J.

New Detroit—Draft Gauges. Detroit Air Conditioning Service Co., Inc., Nashville, Mich.

Niagara—Furnaces, Blowers, Oil Burners, Air Conditioning Units. Forest City Foundries Co., Cleveland, Ohio.

Nibco—Copper Tube Fittings. Northern Indiana Brass Co., Elkhart, Ind.

Nib-Shear—Power Nibber-Shear. H.A. Mfg. Co., York, Pa.

Nickelend—Welding Rod. Arcos Corp., Philadelphia, Pa.

Nickeloid—Sheets. American Nickeloid Co., Peru, Ill.

Nicuair—Welding Rod. Arcos Corp., Philadelphia, Pa.

Nicuend—Welding Rod. Arcos Corp., Philadelphia, Pa.

Nifer—Metal Sheets. General Plate Div., Metals & Controls, Attleboro, Mass.

Niteair—Night Air Cooling Fans. Lau Blower Co., Dayton, Ohio.

Nitecool—Fans. Air Equipment Co., Inc., Chicago, Ill.

Nitectic—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N. Y.

Noah's Pitch—Waterproofing. Philip Carey Mfg. Co., Cincinnati, Ohio.

NoDrip—Insulation. J. W. Mortell Co., Kankakee, Ill.

No-Dust—Grinders. Hammond Machinery Builders, Inc., Kalamazoo, Mich.

Non-Clogging—Spray Nozzles. Link Belt Co., Chicago, Ill.

Non-Con-Dux—Cement, Paper, Paste. Grant Wilson, Inc., Chicago, Ill.

Non-Syphoning—Steel Roofing. Inland Steel Products Co., Milwaukee, Wis.

No-Ox-Id—Rust Preventive Chemicals. Dearborn Chemical Co., Chicago, Ill.

Norblo—Blowers. Northern Blower Co., Cleveland, Ohio.

Norco—Furnace Repair Parts. Northwestern Stove Repair Co., Chicago, Ill.

Northco—Ventilating Systems. A. R. Wood Mfg. Co., Luverne, Minn.

Norwalker—Duct and Duct Fittings, Furnaces. Norwalk Air Conditioning Corp., South Norwalk, Conn.

Norwesco—Ducts, Duct Accessories, Flashings, Gutters, Conductor and Furnace Pipe and Fittings, Ridge Rolls, Roof Trim. Northwest Metal Products, Inc., Seattle, Wash.

Nor'wester—Blowers. Grand Rapids Die & Tool Co., Grand Rapids, Mich.

No-Spat—Welding Flux. Midland Paint & Varnish Co., Cleveland, Ohio.

No-Streak—Registers. Rock Island Register Co., Rock Island, Ill.

No Tar In—Roofing Paint. Rutland Fire Clay Co., Rutland, Vt.

Novoid—Bases, Insulation. National Cork Co., Englewood, N. J.

Nox Soot—Soot Remover. Saginaw Salt Products Co., Saginaw, Mich.

Nu-Air—Fan Blades, Fans, Louvers, Ventilators. Meier Electric & Machine Co., Indianapolis, Ind.

Nu-Air—Odor Adsorbers. Charles E. Manning Co., Pittsburgh, Pa.

Nu-Alpina—Gravity Roof Ventilators. Inland Steel Products Co., Milwaukee, Wis.

Nu Arc—Arc Welders. Electric Arc, Inc., Newark, N. J.

Nu Braze—Flux. American Silver Co., Inc., Flushing, N.Y.

Nudeck—Roof Cement. United Gilsonite Laboratories, Scranton, Pa.

Nu Galv—Metal Protecting Paint. Southern States Iron Roofing Co., Savannah, Ga.

Nu-Notch—Ventilators. Knowles Mushroom Ventilator Co., Upper Montclair, N. J.

Nupla—Mallets. New Plastic Corp., Hollywood, Calif.

Nutipe—Gas Conversion Burners. Columbia Burner Co., Toledo, Ohio.

Nu-Trojan—Combustion Chambers. A. R. Webber Co., Inc., New Haven, Conn.

NuVac—Furnace Vacuum Cleaners. Empire Chemical Products Co., Newark, N. J.

Nuweld—Skylight Wire Glass. Blue Ridge Glass Corp., Kingsport, Tenn.

Nu-Wood—Rigid Insulation. Wood Conversion Co., St. Paul, Minn.

O

Oasis—Dehumidifiers. Ebco Mfg. Co., Columbus, Ohio.

Octagon Power—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.

Octagon Siphon—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.

Octopus—Exhausters. Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

OEM—Combustion Chambers, Baffles. Oil Equipment Mfg. Corp., New Haven, Conn.

Ohioan—Water Heaters. Hotstream Heater Co., Cleveland, O.

Oil-A-Fire—Burners, Furnaces. Automatic Firing Corp., St. Louis, Mo.

Oil-Aire-Flo—Oil Furnaces. Lennox Industries, Inc., Marshalltown, Iowa.

Oil Economy—Furnaces. International Heater Co., Utica, N. Y.

Oil-Flo—Furnaces. Coal-O-Matic Co., Trucksville, Pa.

Oilifter—Fuel Oil Pump. A-P Controls Corp., Milwaukee, Wis.

Oil-n-Aire—Oil Burners. Breeze Corps, Inc., Newark, N. J.

Oil-O-Matic—Oil Burners, Furnaces. Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., Bloomington, Ill.

Oil-Treet—Fuel Oil Solvents. Saginaw Salt Products Co., Saginaw, Mich.

OK—Grinders. Hammond Machinery Builders, Inc., Kalamazoo, Mich.

Ol'Faithful—Humidifiers. Maid-O-Mist, Inc., Chicago, Ill.

Oneida Royal—Furnaces. Oneida Heater Co., Inc., Oneida, N. Y.

One-Minute—Furnaces. Worsham Co., Inc., St. Louis, Mo.

Orlando—Furnaces. Sunbeam Air Conditioner Div., American Radiator & Standard Sanitary Corp., Elyria, O.

Our-O-Wall—Registers. Rock Island Register Co., Rock Island, Ill.

Ovaltube—Gas Burners. Beck Engineering Combustion Company, St. Louis, Mo.

O.X.—Punches. Duro-Dyne Corp., New Hyde Park, L.I., N. Y.

Oxweld—Welding Apparatus. Linde Air Products Co., New York, N. Y.

Ozark—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

Onite—Insulation. American Hair & Felt Co., Chicago, Ill.

P

Pabco Coolite—Sheet Metal Paint. Pabco Products Inc., San Francisco, Calif.

Pacific—Furnaces. W. W. Rosebaugh Co., Salem, Ore.

Pacific—Water Heaters. United States Radiator Corp., Detroit, Mich.

Packaged Weather—Store Coolers. General Electric Co., Bloomfield, N. J.

Paintbond—Bonderized Sheets. United States Steel Corp., Pittsburgh, Pa.

Paintgrip—Metal Sheets. Armco Steel Corp., Middletown, Ohio.

Pak-Ice—Machines. Vilter Mfg. Co., Milwaukee, Wis.

Palco Wool—Saferized—Insulation. Pacific Lumber Co., San Francisco, Calif.

Palmaire—Evaporative Air Conditioning Units. Palmer Mfg. Co., Phoenix, Ariz.

Palm Beach—Controls. National Modulation Co., St. Paul, Minn.

Palmetto—Gaskets. Greene, Tweed & Co., North Wales, Pa.

Panelaire—Wall Furnaces. Payne Div. of Carrier Corp., Monrovia, Calif.

Panelbloc—Direct Fired Heaters. Pradaniel Corp., South Norwalk, Conn.

Panelray—Furnaces. Day & Night Div., Carrier Corp., Monrovia, Calif.

Papico—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.

Paragon Booster—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.

Paramount—Evaporative Air Conditioners. Essick Mfg. Co., Los Angeles, Calif.

Paramount—Flashing. Flemm Lead Co., Inc., Long Island City, N. Y.

Paramount—Hollow Metal Windows. Willis Steel Corp., Galesburg, Ill.

Paramount-Master—Evaporative Coolers. Essick Mfg. Co., Los Angeles, Calif.

Parco—Skylight Lifts. Park City Cornice Works, Inc., Bridgeport, Conn.

Parkway—Furnaces. Heil Co., Milwaukee, Wis.

Parx LPG—Water Heaters. EverHot Heater Co., Detroit, Mich.

Patrol—Gas Burner Pilots. Cleveland Heater Co., Cleveland, Ohio.

Payneheat—Furnaces. Payne Div. of Carrier Corp., Monrovia, Calif.

PBA Unit—Utility Room Furnace. Dowagiac Steel Furnace Co., Dowagiac, Mich.

Pee Vee Cee—Plastic Sheets. Atlas Mineral Products Co., Mertztown, Pa.

Pemco—Stainless Firebox Fittings, Baffles. Oil Equipment Mfg. Co., New Haven, Conn.

Penetrol—Paint. Flood Co., Cleveland, Ohio.

Penfield—Water Heater. John Wood Co., Conshohocken, Pa.

Pendex—Flexible Metal Hose and Fittings. Pennsylvania Flexible Metallic Tubing Co., Philadelphia, Pa.

Penglass—Roof Ventilators. Pennsylvania Wire Glass Co., Philadelphia, Pa.

Penguin—Oil Burners. Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.

Penn-Aire—Furnaces. Union Mfg. Co., Inc., Bovertown, Pa.

Penna—Furnaces. Pennsylvania Furnace & Iron Co., Warren, Pa.

Penn Drake—Rust Preventive Chemicals. Fuel Oil Solvents. Pennsylvania Refining Co., Ohio Div., Cleveland, O.

Penn Power—Fans. Penn Ventilator Co., Philadelphia, Pa.

PennSalt—Rust Preventive, Chemicals and Cleaners. Pennsylvania Salt Mfg. Co., Philadelphia, Pa.

Pentco—Punches & Snips. Penn Tool Co., Philadelphia, Pa.

Perco-Flash—Water Heaters. Kresno-Stamm Mfg. Co., Palisades Park, N. J.

Percoproof—Waterproofing. Philip Carey Mfg. Co., Cincinnati, Ohio.

Perfectaire—Air Conditioning Units, Dehumidifiers, Furnaces, Louvers and Shutters, Oil Heaters, Heat Recoverers. Air Conditioning Engineering Co., Cambridge, Mass.

Perfection—Eaves Trough Fittings and Accessories. Iwan Bros., South Bend, Ind.

Perfecto—Combustion Chambers. A. P. Green Fire Brick Co., Mexico, Mo.

Perfusaire—Diffusers, Registers. Auer Register Co., Cleveland, O.

Perim-A-Base—Small Pipe Heating Systems. Berger Furnace Corp., Belle Vernon, Pa.

Perima-flo—Metal Duct and Fittings, Furnace Pipe and Fittings. Lennox Industries, Inc., Marshalltown, Ia.

Permadine—Coating Chemical for Steel or Iron Surfaces. American Chemical Paint Co., Ambler, Pa.

Perim-O-Therm—Baseboard Diffusers, Registers. Flangeklamp Corp., Buffalo, N. Y.

Perma-Fan—Refrigerating Condensers. Drayer-Hanson, Inc., Subsidiary of National-U.S. Radiator Corp., Los Angeles, Calif.

Perm-Align—Electric Drills. John Oster Mfg. Co., Milwaukee, Wis.

Permaglas—Water Heaters. A. O. Smith Corp., Permaglas Div., Kankakee, Ill.

Perma-Ply—Roofing Felt. Owens-Corning Fiberglas Corp., Toledo, O.

Pernoco—Evaporative Coolers. Pernot Corp., Norwalk, Calif.

Pet—Electric Buffers, Grinders, Polishers and Sanders, Electric Drills. Portable Electric Tools, Inc., Chicago, Ill.

Pexto—Metal Workers Machines and Tools, Roofers Tools. Peck, Stow & Wilcox Co., Southington, Conn.

P & H—Welding Rods, Electrodes, Hoists, Arc Welders. Harnischfeger Corp., Milwaukee, Wis.

Phoenix—Registers. Air-Factors, Inc., Monrovia, Calif.

Phosco—Welding Rod. United Wire & Supply Corp., Providence, R. I.

Phosteen—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.

Pickle Polish—Stainless Cleaner. American Chemical Paint Co., Ambler, Pa.

Pilotstat—Gas Pilot Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Pioneer—Controls. Crown Controls Co., Inc., New Bremen, Ohio.

Pittsburgh—Suspended Furnaces, Gas Fired Unit Heaters. Automatic Gas Equipment Co., Pittsburgh, Pa.

P.I.V.—Variable Speed Transmissions. Link-Belt Co., Chicago, Ill.

P-K—Nails, Screws. Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.

Planeweld—Welding Rod. Lincoln Electric Co., Cleveland, Ohio.

Plas-Dux—Caulking Compound. Babbitt Chemical Specialties Co., New Bedford, Mass.

Plasti-Calk—Caulking Compounds. Chamberlin Co. of America, Detroit, Mich.

Plastic Elastigum—Cement. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.

Plastic Insulcrete—Refractories. Quigley Co., Inc., New York, N. Y.

Plastic PB—Cement Barret Div., Allied Chemical & Dye Corp., New York, N. Y.

PlastiKon—Rubber Putty. B. F. Goodrich Co., Akron, Ohio.

Plastikrim—Plastic Mouldings, Trim. R. F. Werner Co., New York, N. Y.

Plastispray—Waterproofing. Liquid Plastics Corp., Long Island City, N. Y.

Plastite—Roof Cement. Coopers Creek Chemical Corp., West Conshohocken, Pa.

Plastoid—Caulking Compounds, Furnace Cement. Plastic Products Co., Detroit, Mich.

Playford—Stokers. Rosedale Foundry & Machine Co., Pittsburgh, Pa.

Plexiform—Blowers. Bayley Blower Co., Milwaukee, Wis.

Plotron—Cleanable Air Filters. Good-year Tire & Rubber Co., Inc., Akron, O.

Plymouth—Water Heaters. Gray & Dudley Co., Nashville, Tenn.

PL-210—Flux. Paul-Lewis Laboratories, Inc., Milwaukee, Wis.

Porcenell—Metal Protective Coatings. Allied Porcenell, Inc., Waukegan, Ill.

Porto-Shear—Electric Shears. Black & Decker Mfg. Co., Towson, Md.

Portovent—Flexible Duct. Flexaust Co., New York, N. Y.

Poweraire—Furnaces. Jackson & Church Co., Saginaw, Mich.

Powerbilt—Exhausters. Power Engineering Co., Chicago, Ill.

Power-Flame—Gas Burners. Siemon Mfg. Co., Grandview, Mo.

Power-Flo—Blowers, Blower Wheels, Exhausters. Brookside Products Co., Inc., McCordsville, Ind.

Power-Flow—De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.

Powergas—Gas Burners. Jackson & Church Co., Saginaw, Mich.

Power-Line—Staplers. Powers Wire Products Co., Detroit, Mich.

Poweroil—Oil Burners. Jackson & Church Co., Saginaw, Mich.

Power-Pac—Fans. Uno Ventilator Co., Malden, Mass.

Power-Poise—Electric Motors. Brown-Brockmeyer Co., Inc., Dayton, O.

PowerRated—Commercial-Industrial Furnaces. Jackson & Church Co., Saginaw, Mich.

Powerstat—Gas Pressure Regulating Valves. Mercoid Corp., Chicago, Ill.

Power Vane—Pneumatic Grinders. Chicago Pneumatic Tool Co., New York, N. Y.

Powrmatic—Furnaces. Water Heaters, Oil Burners. Kresno-Stamm Mfg. Co., Palisades Park, N. J.

PRC—Adhesive Tape for Ducts. Products Research Co., Los Angeles, Calif.

Precipitron—Electrical Air Cleaners. Westinghouse Elec. Corp., Sturtevant Div., Hyde Park, Boston, Mass.

Premier—Welding Rod. American Steel & Wire Div., U. S. Steel Corp., Cleveland, Ohio.

Premier Automatik—Stoker-Fired Air Conditioning Furnaces. Premier Furnace Co., Dowagiac, Mich.

Premier DeLux—Furnaces. Premier Furnace Co., Dowagiac, Mich.

Premier Master—Furnaces. Premier Furnace Co., Dowagiac, Mich.

Pre-Notch—Ducts, Furnace Pipe and Fittings. Gray Metal Producers, Inc., Rochester, N. Y.

Prepnocote—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.

Preprite—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.

Prepawash—Rust Preventive Chemicals. Neilson Chemical Co., Detroit, Mich.
Pressico—Furnace and Roof Cement, Compounds, Paint. Prestite Engineering Co., St. Louis, Mo.
Presteel—Metal Stampings. Worcester Pressed Steel Co., Worcester, Mass.
Presto—Soldering Torch. American Products Corp., Chicago, Ill.
Prest-O-Lite—Soldering Torches, Welding Equipment. Linde Air Products Co., New York, N. Y.
Prest-O-Weld—Oxy-Acetylene Welding Equipment, Torches. Linde Air Products Co., New York, N. Y.
Prime-Kote—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Princo—Hygrometers, Psychrometers, Electric Relays, Thermometers and Thermostats. Precision Thermometer and Instrument Co., Philadelphia, Pa.
Propellair—Fans and Ventilators. Robbins & Myers, Inc., Springfield, Ohio.
Prop-R-Temp—Air Conditioning Units. Typhoon Air Conditioning Co., Div. of Hupp Corp., Brooklyn, N. Y.
Protacul—Sheet Metal Paint. Coopers Creek Chemical Corp., West Conshohocken, Pa.
Protecto-glo—Controls. Minneapolis-Honeywell Reg. Co., Minneapolis, Minn.
Protectoline—Rust Preventive Chemicals. Magnus Chemical Co., Garwood, N. J.
Protector—Snow Guards. David Levow, New York, N. Y.
Protector—Germicidal Lamps. Merchandising and Manufacturing Associates, Inc., Lancaster, Pa.
Proctorelay—Oil Burner Relays. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Pul-Air—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
Pul-Lift—Hoist. Yale & Towne Mfg. Co., Philadelphia, Pa.
Pullman—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
Pullmax—Sheet Metal Working Machines. American Pullmax Co., Inc., Chicago, Ill.
Punchawl—Tools. Hub Specialty Co., Reading, Mass.
Punch Pal—Punches. Wilder Mfg. Co., Inc., Carmel, Calif.
Pur Air—Odor Absorbers. Barnebey-Cheney Co., Columbus, O.
Pure Dure—Water Heaters. Continental Water Heater Co., Los Angeles, Calif.
Purox—Oxy-Acetylene Welding Equipment and Torches. Linde Air Products Co., New York, N. Y.
Pyralux—Enamels and Lacquers. E. I. du Pont de Nemours & Co., Wilmington, Del.
Pyrotron—Temperature Recorders. Bailey Meter Co., Cleveland, Ohio.

Q

Q-Chrome—Insulating Cement. Quigley Co., Inc., New York, N. Y.
Q-Chromastic—Insulating Cement. Quigley Co., Inc., New York, N. Y.
Q-T Ductliner—Building and Duct Insulation. Celotex Corp., Chicago, Ill.
Quad—Furnace Blowers. Trade-Wind Motorfans, Inc., Rivera, Calif.
Quaker City—Gutters and Gutter Accessories, Snow Guards, Conductor Pipe and Fittings, Ridge Roll. Berger Bros. Co., Philadelphia, Pa.
Quantrol—Duct Turning Vanes. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.

Quick Action—Clamps. C W R Mfg. Co., Morro Bay, Calif.
Quick-As-Wink—Solenoid Valves, Metal Hose. Hunt & Son, Inc., C. B., Salem, Ohio.
Quick Heat—Furnaces. American Stove Co., St. Louis, Mo.
Quick Heat—Blowers, Furnaces. Tjernlund Mfg. Co., St. Paul, Minn.
Quick Heater—Oil Burners, Furnaces, Stokers, Quick Furnace & Supply Co., Des Moines, Iowa.
Quick-Set—Roof Cement. Bird & Son, Inc., East Walpole, Mass.
Quick-Set—Dividers and Notchers. Reinert & Campbell Co., Inc., Elizabeth, N. J.
Quiet Flame—Oil Burners. Volcano Burner Corp., New York, N. Y.
Quiet Kool—Air Conditioning Units. Quiet-Heat Mfg. Corp., Subsidiary of Emerson Radio & Phonograph Corp., Newark, N. J.
Quiet Zone—Blowers. Palmer Mfg. Co., Phoenix, Ariz.
Quilt—Insulation. Samuel Cabot, Inc., Boston, Mass.

R

Racine—Stokers. Nelson Bros. & Strom Co., Racine, Wis.
Radiaire Base-Heat—Baseboard Diffusers. York-Shipley, Inc., York, Pa.
RadianTile—Ducts and Fittings. Cannelton Sewer Pipe Co., Cannelton, Ind.
Radiaire—Baseboard Diffusers. York-Shipley, Inc., York, Pa.
Radius Master—Templates. Rapidesign, Inc., Glendale, Calif.
Radolite—Insulating Cement and Refractories. Pyrolite Products Co., Cleveland, Ohio.
Rail Hugger—Hand Hoists. Yale & Towne Mfg. Co., Philadelphia, Pa.
Ramco—Chimney Caps and Tops, Ventilators. Royal-Apex Mfg. Co., Inc., Brooklyn, N. Y.
Ram-Ex—Portable Hammer. E. V. Nielsen, Inc., Stamford, Conn.
Ramfeed—Stokers. Canton Stoker Corp., Canton, Ohio.
Ranarex—CO₂ Analyzers. Permutit Co., New York, N. Y.
Ranchief—Furnaces. Conco Engineering Works, Mendota, Ill.
Range-Ventor—Fans, Vent Hoods. Universal Blower Co., Birmingham, Mich.
Rawl-Anchors—Bolts. Rawlplug Co., Inc., New York, N. Y.
Rawl-Drive—Expansion Bolts. Rawlplug Co., Inc., New York, N. Y.
Rawl Hammer-Set—Bolts. Rawlplug Co., Inc., New York, N. Y.
Rawl-Tapers—Expansion Bolts. Rawlplug Co., Inc., New York, N. Y.
Rawl-Toggle—Bolts—Bolts. Rawlplug Co., Inc., New York, N. Y.
Raymaster—Refrigerant Leak Detectors. Gates & Co., Inc., George W., Franklin Sq., L. I., N. Y.
Reco—Fans, Motors, Buffers, Relays and Switches. Reynolds Electric Co., River Grove, Ill.
Recold—Coils, Condensers, Cooling Towers. Refrigeration Engineering, Inc., Los Angeles, Calif.
Recoy—Air Conditioning Units, Cooling and Heating Coils, Refrigerating Condensers. Refrigeration Economics Co., Inc., Canton, Ohio.
Red Cap—Spinner Ventilator. Warner Ventilator Co., LaGrange, Ind.
Red Crown—Domestic Water Heaters. Hynes & Cox Electric Corp., Watervliet, N. Y.
Red Devil—Furnace Cement. Pecora Paint Co., Philadelphia, Pa.
Reddy-On—Furnace Door Closer. Leisur-Maid Mfg. Corp., Grand Rapids 3, Mich.
Red End—Hack Saw Blades. Simonds Saw & Steel Co., Fitchburg, Mass.
Redi-Flo—Registers. Air Conditioning Products Co., Detroit, Mich.
Redi-Set—Sheet Metal Workers' Tools. Whitney Metal Tool Co., Rockford, Ill.
Red Metal—Roof Paint. Rutland Fire Clay Co., Rutland, Vt.
Red-Reading-Mercury—Hygrometers, Psychrometers and Thermometers. The Palmer Thermometers, Inc., Cincinnati, Ohio.
Red Seal—Sheets. Benjamin Wolff and Co., Chicago, Ill.
Red Sreak—Shear Blades. Simonds Saw & Steel Co., Fitchburg, Mass.
Red Tang—Metal Files. Simonds Saw & Steel Co., Fitchburg, Mass.
Red Top—Insulation. United States Gypsum Co., Chicago, Ill.
Red Top—Thermostats. H-B Instrument Co., Philadelphia, Pa.
Red X—Cleaners and Polishers. Turco Products, Inc., Los Angeles, Calif.
Regal—Roofing Cement, Roofing Felt. Johns-Manville, New York, N. Y.
ReGalv—Cold Galvanizing Compounds. RotoMetals, San Francisco, Calif.
Rego—Brazeing Torches. National Cylinder Gas Co., Chicago, Ill.
Reillaloy—Furnace Repair Parts. Pittsburgh Furnace Parts Co., Pittsburgh, Pa.
Rely-on—Caulking Compounds. Armstrong Co., Chicago, Ill.
Renu-glas—Air Filters. American Air Filter Co., Inc., Louisville, Ky.
Repro—Furnaces. Republic Products Co., Philadelphia, Pa.
Republic—Induced Draft Blowers, Furnaces, Conversion Gas Burners, Incinerators, & Heat Recoverers. Autogas Co., Bellwood, Ill.
Republic-Taylor—Terne Roofing Plates. Republic Steel Corp., Cleveland, Ohio.
Resiscote—Paint. Reilly Tar & Chemical Corp., Indianapolis, Ind.
Rev-flo—Furnaces. Sequoia Mfg. Co., San Carlos, Calif.
Revolving—Ventilator. Accurate Sheet Metal & Mfg. Works, Chicago, Ill.
Revolving—Roof Ventilators. Burt Mfg. Co., Akron, Ohio.
Rex—Bearings, Fans, Fan Blades, Blower-Filter Units, Blowers, Blower Wheels. Air Controls Inc., Cleveland, Ohio.
Rex—Bearings and Nozzles. Chain Belt Co., Milwaukee, Wis.
Rex—Controls, Draft Diverters, Water Heaters. Cleveland Heater Co., Cleveland, Ohio.
Rex—Roof Flashing. Simplex Mfg. Co., Fond du Lac, Wis.
Rex-Airate—Fans, Blowers, Ventilators. Air Controls, Inc., Cleveland, Ohio.
Rex-Air-Pak—Blower Units. Air Controls, Inc., Cleveland, Ohio.
Rexarc—Welding Rods. Sight Feed Generator Co., West Alexandria, Ohio.
Rexco—Refractories. Rex-Roto Corp., Detroit, Mich.
Rex-Flex—Flexible Duct, Flexible Metal Hose and Fittings. Flexonics Corp., Maywood, Ill.
Rexide—Metal Protecting Paint. A. C. Horn Co., Inc., Long Island City, N. Y.
Rex Junior—Welders. Rex Welder Co., Kansas City, Mo.
Rexoil—Oil Burners and Furnaces. Reif-Rexoil, Inc., Buffalo, N. Y.

Rex-Tube—Flexible Duct. Flexonics Corp., Maywood, Ill.
 Rex-Weld—Flexible Duct. Flexonics Corp., Maywood, Ill.
 Rex-Weld Unimetal—Flexible Hose. Flexonics Corp., Maywood, Ill.
 Rexwelders—Spot Welders. Rex Welder Co., Kansas City, Mo.
 Rezistal—Stainless Steels. Crucible Steel Co. of America, Pittsburgh, Pa.
 R & G—Grilles, Registers & Grille Mfg. Co., Inc., Brooklyn, N. Y.
 Rheotrol—Horizontal Oil Burners. Breese Burners, Inc., Chicago, Ill.
 Rhinamel—Enamels. Tropical Paint Co., Cleveland, Ohio.
 Rhino—Compounds, Paint. Pecora Paint Co., Philadelphia, Pa.
 Rhodes Universal—Sheet Metal Working Machines. U. S. Tool & Die, Inc., Sharpsburg, Pa.
 R & I—Furnace Cement and Insulation, Baffles, Combustion Chambers. Refractory & Insulation Corp., New York, N. Y.
 Rice—Furnace Brushes. Worcester Brush & Scraper Co., Div. Mason Worcester Co., Worcester, Mass.
 Rid-All—Odor Adsorbers. Abbeon Supply Co., Jamaica, N. Y.
 Rid All—Incinerators. Schwab Furnace Co., Milwaukee, Wis.
 Ridge—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
 Ridgevent—Roof Ventilators. Octagon Ventilator Co., Chicago, Ill.
 Ridgulator—Ridge Roof Ventilator. Klauer Mfg. Co., Dubuque, Iowa.
 Riflex—Flexible Hose and Fittings. United Metal Hose Co., Inc., Long Island City, N. Y.
 Rigid-PVC—Plastic Tubing. Easton Plastics Co., Easton, Pa.
 Rigid-Tex—Metal Sheets. Rigidized Metals Corp., Buffalo, N. Y.
 Rip-o-Lin—Enamels. Glidden Co., Cleveland, Ohio.
 Rippl—Paint. Hilo Varnish Corp., Everett, Mass.
 Ripple Fin—Coils. McQuay, Inc., Minneapolis, Minn.
 Ripple Tube—Coils. McQuay, Inc., Minneapolis, Minn.
 Rival—Conductor Straps. David Levow, New York, N. Y.
 River Breeze—Exhausters and Fans. Kloppenborg Aluminum Fdry., Davenport, Iowa.
 Rivnut—Blind Fasteners. B. F. Goodrich Co., Akron, Ohio.
 R. & M.—Motors, Hoists, Air Conditioning Units. Robbins & Myers, Inc., Springfield, Ohio.
 R-Mir-Dek—Paint. Miracle Adhesives Corp., New York, N. Y.
 Robinson—Presses. New Albany Machine Mfg. Co., New Albany, Ind.
 Robot—Thermostats. Miller-Harris Instrument Co., Milwaukee, Wis.
 Rock Cork—Insulation. Johns-Manville, New York, N. Y.
 Roesch—Clamps. C W R Mfg. Co., Morro Bay, Calif.
 Roll-O-Mat—Filters. American Air Filter Co., Inc., Louisville, Ky.
 Roof Flange—Flashing. Eagle-Picher Co., Cincinnati, Ohio.
 Roofkoter—Paint. Tropical Paint Co., Cleveland, Ohio.
 Rotary—Ventilators. Swartwout Co., Cleveland, Ohio.
 Roto—Insulating Cement and Combustion Chambers. Rex-Roto Corp., Detroit, Mich.
 Roto-Clone—Dust Collectors. American Air Filter Co., Inc., Louisville, Ky.
 Rotoflame—Oil Burners. Oil Equipment Laboratories, Inc., Elizabeth, N. J.

Rotojet—Nozzles. Binks Mfg. Co., Chicago, Ill.
 Roxaprene—Enamels and Lacquers. Roxaline Flexible Finishes, Inc., Elizabeth, N. J.
 Royal—Furnaces. Hart & Crouse Corp., Oneida, N. Y.
 Royal—Furnaces. Chattanooga Royal Co., Chattanooga, Tenn.
 Royal—Ventilators. Penn Ventilator Co., Philadelphia, Pa.
 Royal—Water Heaters. Bastian-Morley Co., Inc., LaPorte, Ind.
 Royalastic—Roof Cement. A. Wilhelm Co., Reading, Pa.
 Royal Blue—Acid and Furnace Brushes. Schaefer Brush Mfg. Co., Milwaukee, Wis.
 Royal Clipper—Metal Cutter. Merchandising and Manufacturing Associates, Inc., Lancaster, Pa.
 RP—Dust & Grease Filters. Research Products Corp., Madison, Wis.
 RPM—Steel Sheets and Roofing. H. H. Robertson Co., Pittsburgh, Pa.
 RP Super Handi-Koter—Odor Absorbers. Research Products Corp., Madison, Wis.
 R-R-M—Hygrometers, Psychrometers, Thermometers. Palmer Thermometers, Inc., Cincinnati, Ohio.
 Rubalt—Paints, Waterproofing. Alfred Hague & Co., Inc., Brooklyn, N. Y.
 Rubber-in-Shear—Vibration Isolating Pads. Korfund Co., Long Island City, N. Y.
 Rubyfluid—Solder, Soldering Flux, Ruby Chemical Co., Columbus, Ohio.
 R-U-F—Fans. Reed Unit-Fans, Inc., New Orleans, La.
 Rusco—Windows. F. C. Russell Co., Cleveland, Ohio.
 Rust Bloc No. 20—Coating. Turco Products, Inc., Washington, D. C.
 Rustnil—Paints. National Engineering Products, Inc., Washington, D. C.
 Rustrem—Aluminum Paint. Speco, Inc., Cleveland, Ohio.
 Rust Sol—Metal Cleaner. Klem Chemicals, Inc., Dearborn, Mich.
 Rysdon—Ventilators. Sioux Steel Co., Sioux Falls, S. D.

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SaberSaw—Saw Blades. Thor Power Tool Co., Aurora, Ill.
 Saf-Aire—Furnaces. Stewart-Warner Corp., U. S. Machine Div., Indianapolis, Ind.
 Safe-Hi—Ladder Shoes. Rose Mfg. Co., Denver, Colo.
 Safe-T-Matic—Masonry Nail Driver. Safety Nail Driver Corp., Clifton, N. J.
 Safety Silhouette—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.
 St. Louis—Stoker. Ormsby-Osterman Co., St. Louis, Mo.
 Sal-Mo—Cement, Insulation, Flexible Duct Connections, Asbestos Paper, Paste, Non-Metallic Sheets. Sall Mountain Co., Hamilton, Ohio.
 Salamander—Roofing Felt. Johns-Manville, New York, N. Y.
 Samco—Cement. Standard Asbestos Mfg. Co., Chicago, Ill.
 Samco—Incinerators. Union Mfg. and Gauge Co., Syracuse, N. Y.
 Samco—Floor Furnaces. Samuel Stamping & Enameling Co., Chattanooga, Tenn.
 Sampson—Furnace Brushes. Worcester Brush & Scraper Co., Worcester, Mass.
 Santolene—Fuel Oil Solvent. Monsanto Chemical Co., St. Louis, Mo.
 Satanite—Refractories. Green Fire Brick Co., A. P., Mexico, Mo.
 Sav-A-Tank—Rust Preventive. Sudbury Laboratory, South Sudbury, Mass.
 Sav-Haf—Oil Burners. Breeze Corps., Inc., Newark, N. J.
 Saw Gun—Portable Hack Saw. Mid-States Welder Mfg. Co., Chicago, Ill.
 Sax—Oil Burners. Aldrich Co., Wyoming, Ill.
 SC—Bearings. Dodge Mfg. Corp., Mishawaka, Ind.
 SCM—Bearings. Dodge Mfg. Corp., Mishawaka, Ind.
 Schild-Bilt—Attic Fans. Fresh Air Circulator Co., Houston, Tex.
 Schmidt—Soldering and Brazing Torches. Minn-Kota Foundry & Mfg. Co., Fargo, N. D.
 Sco-Co—Roof Cement, Caulking Compounds, Paint, Waterproofing. Southport Paint Co., Savannah, Ga.
 Scotsman—Gas Burners, Furnaces. Queen Stove Works, Inc., Albert Lea, Minn.
 Screw-Tite—Nails. Independent Nail & Packing Co., Bridgewater, Mass.
 Scribus-Divides—Scribers, Dividers, Calipers, Wiggler. Nork Products Co., Los Angeles, Calif.
 Scrugun—Automatic Screw Driver. Black & Decker Mfg. Co., Towson, Md.
 S.D.T. Freeze Proof—Coils. John J. Nesbitt, Inc., Philadelphia, Pa.
 S-E—Gravity Roof Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.
 Sealap—Roofing Cement. Johns-Manville, New York, N. Y.
 Sea Lion—Leather Belting. Chicago Belting Div., Chicago-Allis Mfg. Corp., Chicago, Ill.
 Seal Master—Bearings. Stephens-Adamson Mfg. Co., Aurora, Ill.
 Sealtight—Roof Cement, Caulking Compounds, Roofing Felt, Flashings. W. R. Meadows, Inc., Elgin, Ill.
 Seal-Tite—Registers. Char-Gale Mfg. Co., Minneapolis, Minn.
 Seasonmaker—Air Conditioning Units, Evaporative Coolers. McQuay, Inc., Minneapolis, Minn.
 Seasonmaster—Air Conditioning Units. McQuay, Inc., Minneapolis, Minn.
 Security—Paint, Caulking Compounds and Felt Roofing. National Mfg. Corp., Tonawanda, N. Y.
 Security—Furnaces, Water Heaters. Rasch Mfg. Corp., Kansas City, Mo.
 Seilon—Plastic Panels, Non-Metallic Sheets. Seiberling Rubber Co., Plastics Div., Newcomerstown, O.
 Selectair—Air Conditioning Units and Oil Furnaces. S. T. Johnson Co., Oakland, Calif.
 Select-O-Speed—Variable Speed Transmissions. Lovejoy Flexible Coupling Co., Chicago, Ill.
 Selectric—Storage Water Heaters. Bastian-Morley Co., Inc., LaPorte, Ind.
 Selfweld—Welding Rod. Lincoln Electric Co., Cleveland, O.
 Sells—Bearings. Royersford Foundry & Machine Co., Royersford, Pa.
 Semco—Sheet Metal Working Machines. Service Machine Co., Inc., Elizabeth, N. J.
 Sems—Sheet Metal Screws. Shakeproof Div., Illinois Tool Works, Chicago, Ill.
 Sensatherm—Thermostats. Mercoid Corp., Chicago, Ill.
 Sensitrol—Electrical Relays. Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., Newark, N. J.
 Sentinel—Water Heaters. General Water Heater Corp., Burbank, Calif.
 Sentry—Barometric Dampers, Tank Gauges. Krueger Sentry Gauge Co., Green Bay, Wis.

Service-Master—Truck Bodies. McCabe Powers Auto Body Co., St. Louis, Mo.
Service-Twins—Truck Bodies. McCabe Powers Auto Body Co., St. Louis, Mo.
Sette—Fuel Oil Filters. Marquart Mfg. Co., Oakland, Calif.
SGP—Gas Conversion Burners. Security Mfg. Co., Kansas City, Mo.
Shademaker—Awnings. Cramer Mfg. Co., Canton, O.
Shafer—Bearings. Chain Belt Co., Milwaukee, Wis.
Shaft-King—Variable Speed Transmissions. American Pulley Co., Philadelphia, Pa.
Shallo-Well—Floor Furnace. Oran Co., Columbus, Ohio.
Shear-Flex—Vibration Isolating Bases and Pads. Vibration Mountings, Inc., Elmhurst, N. Y.
Shelby—Tubing. National Tube Div., U. S. Steel Corp., Pittsburgh, Pa.
Shelhed—Oil Burners. Metromatic Mfg. Co., Medford, Mass.
Shield-Arc—Welding Rod, Welders. Lincoln Electric Co., Cleveland, Ohio.
Shipley—Air Conditioning Units. York-Shipley, Inc., York, Pa.
Shock Absorbing—Pillow Blocks. Triangle Mfg. Co., Oshkosh, Wis.
Shopmate—Electric Buffers, Grinders, Polishers and Sanders, Electric Drills. Portable Electric Tools, Inc., Chicago, Ill.
Shorty—Furnaces. John Zink Co., Tulsa, Okla.
Shower-Proof—Paint. Calbar Paint & Varnish Co., Philadelphia, Pa.
Shur Grip—File and Solder Iron Handles. Duro-Dyne Corp., New Hyde Park, L.I., N. Y.
Shut-O-Vent—Louvers and Shutters. Reed Unit-Fans, Inc., New Orleans, La.
Sierra Air—Evaporative Coolers. International Sales Co., San Francisco, Calif.
Siever—Soldering Furnaces and Torches. J. A. Sanders, Fulton, N. Y.
Sil-Bond—Silver Solder. United Wire & Supply Corp., Providence, R. I.
Silent-Blowers. Air Conditioning Equipment Co., Minneapolis, Minn.
Silent Duct—Flexible Duct Connections. Elgen Mfg. Corp., Long Island City, N. Y.
Silent-glow—Oil Burners. Calorol Burners Corp., Hartford, Conn.
Silent Korth—Oil Burners. Eckhart Mfg. Co., Inc., Union, N. J.
Silentblu—Gas Burners. Beck Engineering Combustion Company, St. Louis, Mo.
Silentvane—Blowers. Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.
Sil-Flux—Flux. United Wire & Supply Corp., Providence, R. I.
Sil-Fos—Solder. Handy & Harman, New York, N. Y.
Silicon Bronze—Bolts. Chase Brass & Copper Co., Inc., Waterbury, Conn.
Siloo—Fuel Oil Tank Solvent. Petroleum Solvents Corp., New York, N. Y.
Siloy-Soder—Solder. L. B. Allen Co., Inc., Chicago, Ill.
Silver-Soder—Solder. L. B. Allen Co., Inc., Chicago, Ill.
Silver Steel—Band Saw and Hack Saw Blades. E. C. Atkins & Co., Indianapolis, Ind.
Simplex—Vise. Desmond-Stephan Mfg. Co., Urbana, O.
Sim-trol—Barometric Dampers. Simplex Mfg. Co., Fond du Lac, Wis.
Sioux—Drills, Grinders, Metal Spray Guns, Sanders. Albertson & Co., Inc., Sioux City, Iowa.
Sirocco—Blowers, Washers. American Blower Corp., Detroit, Mich.

S. I. S.—Cement. Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.
Sisalation—Reflective Insulation. American Sisalkraft Corp., Attleboro, Mass.
Sky-Blast—Roof Ventilators. Robbins & Myers, Inc., Springfield, O.
Skymaster—Roof Ventilators. Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
Skyport—S Skylights. Bettcher Plastics Co., Portland, Ore.
S-L—Bar Folders, Nibblers, Slitting Machines. St. Louis Tool Co., St. Louis, Mo.
Slatekote—Roofing Felt. Johns-Manville, New York, N. Y.
Sleevoil—Bearings. Dodge Mfg. Corp., Mishawaka, Ind.
Slim Jim—Air Conditioning Units. Air Products, St. Louis, Mo.
Slo-Speed—Motors. Sterling Electric Motors, Inc., Los Angeles, Calif.
Sludgout—Fuel Oil Tank Solvent. Metropolitan Refining Co., Inc., Long Island City, N. Y.
Smith's—Cleat Benders. R. E. Smith, Waukegan, Ill.
Smithway—Water Storage Heaters, Stokers, Welders. A. O. Smith Corp., Milwaukee, Wis.
Smithway-Burkay—Gas Conversion Burners. A. O. Smith Corp. Toledo, Ohio.
Smokeless Combustion—Furnaces. Worsham Co., Inc., University City, Mo.
Smoothlite—Insulation. Insulite Div., Minnesota and Ontario Paper Co., Minneapolis, Minn.
Snap Action—Humidifier Valves. McDonnell & Miller, Inc., Chicago, Ill.
Snaplok—Furnace Pipe. Reeves Steel & Mfg. Co., Dover, Ohio.
Snap-On—Gutter Guards. Lockhart Mfg. Corp., Detroit, Mich.
Snap-Rite—Ducts, Pipe and Fittings. Gray Metal Products, Inc., Rochester, N. Y.
Snaptite—Gutter Fittings. Berger Mfg. Div., Republic Steel Corp., Canton, Ohio.
Sno-Breze—Evaporative Coolers. Palmer Mfg. Corp., Phoenix, Ariz.
Sno-fluf—Evaporative Cooler Mats. Palmer Excelsior, Inc., Phoenix, Ariz.
Soder—Solder. L. B. Allen Co., Inc., Chicago, Ill.
Sod-R-Braze—Soldering Torches. National Cylinder Gas Co., Chicago, Ill.
Sola-Flame—Oil Burners. East Coast Co., Boston, Mass.
Solder Paint—Solder. Fluxolder Products Co., Detroit, Mich.
Solderprep—Flux for Steel. Neilson Chemical Co., Detroit, Mich.
Solex—Heat Insulating Windows. Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Sol-Flux—Soldering Flux. Klem Chemical Works, Dearborn, Mich.
Solvex—Cleaning Compound. Chemical Solvent Co., Birmingham, Ala.
Sonoairduct—Non-metallic Ducts. Sonoco Products Co., Construction Products Div., Hartsville, S. C.
Sonoairduct-XP—Non-metallic Ducts. Sonoco Products Co., Construction Products Div., Hartsville, S. C.
Sonolastic—Asphalt Paint. L. Sonneborn Sons, Inc., New York, N. Y.
Soot Destroyer—Soot Removers. Sid Harvey, Inc., Valley Stream, N. Y.
Soot Master—Furnace Vacuum Cleaners. Master-Craft Supply Co., Inc., Haverstraw, N. Y.
Sootracide—Soot Remover. Metropolitan Refining Co., Inc., Long Island City, N. Y.
Soroco—Chimney Caps and Tops. South-

bridge Roofing Co., Inc., Southbridge, Mass.
Southaire—Furnace Pipe and Fittings, Stokers, Furnaces. E. E. Souther Iron Co., St. Louis, Mo.
Spacesaver—Suspended Furnaces. Payne Div. of Carrier Corp., Monrovia, Calif.
Special—Furnaces. The Williamson Co., Cincinnati, O.
Special X—Flux. Industrial Service Laboratories, Milwaukee, Wis.
Speco—Soldering Flux. Pianstiehl Chemical Co., Waukegan, Ill.
Speed Clamps—Sheet Metal Fastenings. Tinnerman Products, Inc., Cleveland, Ohio.
Speed Clips—Spring Steel Fastenings. Tinnerman Products, Inc., Cleveland, Ohio.
Speed Grips—Sheet Metal Fastenings. Tinnerman Products, Inc., Cleveland, Ohio.
Speedheater—Gas Unit Heaters. Westinghouse Electric Corp., Sturtevant Div., Hyde Park, Boston, Mass.
Speedmaster—Water Heaters. Handley-Brown Heater Co., Jackson, Mich.
Speed Nuts—Pronged Nuts, Sheet Metal Fastenings. Tinnerman Products, Inc., Cleveland, Ohio.
Speedomax—Recorders. Leeds & Northrup Co., Philadelphia, Pa.
Speed-Trol—Transmissions, Motors. Sterling Electric Motors, Inc., Los Angeles, Calif.
Speedy-Cals—Name Plates. North Shore Nameplate, Inc., Bayville, L.I., N. Y.
Spic-Span—Furnace Vacuum Cleaners. Premier Co., St. Paul, Minn.
Spinner—Ventilators. Inland Steel Products Co., Milwaukee, Wis.
Spintex—Insulation. Johns-Manville, New York, N. Y.
Spiratube—Flexible Duct and Non-Metallic Fittings. Flexible Tubing Corp., Guilford, Conn.
Spirovane—Fans. Western Blower Co., Seattle, Wash.
Split-Aire—Air Conditioning Units. Penn Boiler & Burner Mfg. Corp., Lancaster, Pa.
Spongex—Vibration Isolating Pads, Tubing Insulation, Seals for Registers. B. F. Goodrich Co., Sponge Products Div., Shelton, Conn.
Spot-Aire—Air Conditioning Units. Drayer-Hanson, Inc., Subsidiary of National U.S. Radiator Corp., Los Angeles, Calif.
Spraco—Spray Guns, Humidifiers, Nozzles, Air Washers. Spray Engineering Co., Somerville, Mass.
Spra-Rite—Nozzles. Binks Mfg. Co., Chicago, Ill.
Spray-Acoustic—Insulation. Sprayo-Flake Co., Chicago, Ill.
Spray-Cote—Insulation. Sprayo-Flake Company, Chicago, Ill.
Sprayit—Paint Guns. Thomas Industries Inc., Electric Sprayit Div., Sheboygan, Wis.
Spray Pak—Paint. Chase Products, Inc., Broadview, Ill.
Spray-Seal—Insulation. Sprayo-Flake Co., Chicago, Ill.
Spraywelder—Metal Spray Guns. Wall Colmonoy Corp., Detroit, Mich.
Spray Wheel—Air Washers, Evaporative Coolers. Mountain States Equipment Co., Denver, Colo.
Spreaderflame—Gas Conversion Burners. Eckhart Mfg. Co., Inc., Union, N. J.
Spring-Flex—Vibration Isolating Bases and Pads. Vibration Mountings, Inc., Elmhurst, N. Y.
Springin—Toggle Bolts. Star Expansion Bolt Co., New York, N. Y.

Spunsteel—Pulleys. Spun Steel Corporation, Canton, Ohio.

Spur Geared—Hand Hoists. Yale & Towne Mfg. Co., Philadelphia, Pa.

Squarehead—Aluminum Nails. Independent Nail & Packing Co., Bridgewater, Mass.

S.R.P. 75—Sheet Metal Paint. L. Sonneborn Sons, Inc., New York, N. Y.

S.R.P. 87—Sheet Metal Paint. L. Sonneborn Sons, Inc., New York, N. Y.

Ssircro—Ridge Roll, Roofing, Metal Shingles and Tile. Southern States Iron Roofing Co., Savannah, Ga.

Stable-Arc—Welding Rod. Lincoln Electric Co., Cleveland, Ohio.

Stackmaster—Furnace Regulator. Campbell Eng. Co., Appleton, Wis.

Stack-O-Meter—CO₂ Analyzer. Davis Emergency Equipment Co., Newark, N. J.

Stainlend—Welding Rod. Arcos Corp., Philadelphia, Pa.

Stainless 20—Stainless Clad Sheets. Lukens Steel Co., Coatesville, Pa.

Stainrode—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N. Y.

Stamco—Furnace Pipe, Fittings. Cincinnati Stamping & Furnace Co., Cincinnati, Ohio.

Standard—Roof Ventilators. Burt Mfg. Co., Akron, Ohio.

Standard—Snow Guards. Cromley's, Lewisburg, Pa.

Standard—Furnace. Farris Furnace Co., Springfield, Ill.

Standard—Furnaces. Home Furnace Co., Holland, Mich.

Standard—Furnaces. Williamson Heater Co., Cincinnati, Ohio.

Standard I.F.B.—Combustion Chambers. A. P. Green Fire Brick Co., Mexico, Mo.

Standard Speedmaster—Gas Water Heaters. Handley-Brown Heater Co., Jackson, Mich.

Standard Stationary—Ventilators. Allen Ventilator Div., Production Planning Co., Rochester, Mich.

Standforated—Grilles. Standard Stamping & Perforating Co., Chicago, Ill.

Star—Hack Saw Blades. Clemson Bros., Inc., Middletown, N. Y.

Star—Oil Burners. Mechanical Products Co., Seattle, Wash.

Stark—Furnaces. Hess-Snyder Co., Massillon, Ohio.

Sta-Steel—Soldering Flux. London Chemical Co., Melrose Park, Ill.

Statick—Ventilators. Hirschmann-Pohle Co., Inc., LeRoy, N. Y.

Staxausters—Ventilators. Allen Ventilator Div., Production Planning Co., Rochester, Mich.

Staynew—Air Filters. Dollinger Corp., Rochester, N. Y.

Steel Cable—V-Belts. Goodyear Tire & Rubber Co., Inc., Akron, Ohio.

Steelco—Gutter Guards. Steele Mfg. Co., Ashland, Ky.

Steelfab—Squaring Shears & Presses. Highland Engineering Co., Santa Monica, Calif.

Steel-Fin—Heating Coils. New York Blower Co., Chicago, Ill.

Steellectic—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N. Y.

Steelweld—Sheet Metal Working Machinery. Cleveland Crane & Engineering Co., Wickliffe, Ohio.

Sterling—Evaporative Coolers and Compressors. Reynolds Mfg. Co., Springfield, Mo.

Sterling Beader—Beadng Machines. F. L. Robertson, Buffalo, N. Y.

Steward—Brakes, Benders. Ward Machinery Co., Chicago, Ill.

Stic-Tite—Cement. Refractory & Insulation Corp., New York, N. Y.

Stok-A-Timer—Stoker Controls. Merco Corp., Chicago, Ill.

Stokerator—Domestic Stokers. Northern Steel & Stoker Corp., Peoria, Ill.

Stoker-Disk—Baffles. Insulation & Refractories Co., Williamson, N. Y.

Stokerelay—Relays. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Stonewell—Asbestos-Cement Board. Rubberoid Co., New York, N. Y.

Stop-It—Waterproofing. Tamms Industries Inc., Chicago, Ill.

Storm-Pruf—Oil Burner Vent Caps. Bearlee Products Co., Green Bay, Wis.

Stormseal—Sheet Metal Roofing. American Steel & Wire Div., United States Steel Corp., Cleveland, Ohio; United States Steel Corp., Pittsburgh, Pa.

Stormtight—Roof Cement and Paint. L. Sonneborn Sons, Inc., New York.

Stowaway—Suspended Furnaces. Lennox Industries, Inc., Marshalltown, Iowa.

Straight Edge—Duct and Duct Fittings. Cross & Currier Mfg. Co., Inc., Claremont, N. H.

Strato Cap—Roof Ventilators. Ryniker Steel Products Co., Billings, Mont.

Streamjet—Water Nozzles. Spraying Systems Co., Bellwood, Ill.

Streamline—Ridge Ventilators. H. H. Robertson Co., Pittsburgh, Pa.

Streamline—Copper Tubing and Fittings, Dehydrators, Heat Exchangers, Flux, Solder, Welding Rod, Valves. Mueller Brass Co., Port Huron, Mich.

Streamlined—Combustion Chambers. A. P. Green Fire Brick Co., Mexico, Mo.

Streamliner—Directional Flow Registers. Auer Register Co., Cleveland, Ohio.

Strongharm—Corrugated Steel Roofing. Granite City Steel Co., Granite City, Ill.

Stronghold—Nails. Independent Nail & Packing Co., Bridgewater, Mass.

Structoglas—Plastic Panels. International Molded Plastics, Inc., Cleveland, O.

ST-type—Gas Burner Pilots. John Zink Co., Tulsa, Okla.

Stubby—Floor Furnace. Holly Mfg. Co., Pasadena, Calif.

Stud-Pak—Insulation. United States Mineral Wool Co., Stanhope, N. J.

Styrofoam—Building Insulation. Dow Chemical Co., Midland, Mich.

Styx—Roof Cement. Coopers Creek Chemical Corp., West Conshohocken, Pa.

Sue-Per—Water Heaters. Southwestern Heater Corp., Dallas, Texas.

Sullyne-Clad—Protective Coated Steel Sheets. O'Sullivan Rubber Corp., Winchester, Va.

Sun—Gas and Oil Burners, Condensing Units, Small Pipe Heating Systems, Air Conditioning Units. J. V. Patten Co., Sycamore, Ill.

Sun-Burst—Furnaces. Delta Heating Corp., Trenton, N. J.

Sun Fuel Master—Furnaces. J. V. Patten Co., Sycamore, Ill.

Sun-Glow—Furnaces. Mortemp Div., Mechanical Products Co., Seattle.

Super—Furnaces. The Williamson Co., Cincinnati, O.

Super—Hangers and Fittings. Royal Apex Mfg. Co., Inc., Brooklyn, N. Y.

Super—Heaters. Evans Products Co., Detroit, Mich.

Super—Plastic Furnace Lining. Walsh Refractories Corp., St. Louis, Mo.

Supernair—Air Conditioning Furnaces. St. Louis Furnace Mfg. Co., St. Louis, Mo.

Super Cycle—Electric Tools. Chicago Pneumatic Tool Co., New York, N. Y.

Superdraft—Blowers. Perfection Stove Co., Cleveland, Ohio.

Superfin—Furnaces and Unit Heaters. American Fdry. & Furnace Co., Bloomington, Ill.

Super-Fine—Insulation. L. O. F. Glass Fibers Co., Toledo, O.

Super Firma—Gravity Roof Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.

Superflame—Blowers, Gas Burners, and Furnaces. Queen Stove Works, Inc., Albert Lea, Minn.

Super-Flo—Fans. John Zink Co., Tulsa, Okla.

Super-Flo—Refrigerant Dehydrators. Remco, Inc., Zelenople, Pa.

Superflux—Soldering Flux. Paul-Lewis Laboratories, Inc., Milwaukee, Wis.

Superior—Enamels. Blue Ridge Talc Co., Inc., Henry, Va.

Superior—Blowers. American Foundry & Furnace Co., Bloomington, Ill.

Superior—Storage Water Heaters. Bastian-Morley, Inc., LaPorte, Ind.

Superior—Water Heaters. Crane Co., Chicago, Ill.

Super-Jet—Soldering Torches. Fusion Engineering, Cleveland, Ohio.

Supermetic—Compressors. Serval, Inc., Evansville, Ind.

Super-Por-Seal—Waterproofing. Truscon Laboratories, Detroit, Mich.

Super Powerhouse—Insulating Cement. Baldwin-Hill Co., Trenton, N. J.

Super Red Streak—Furnace Cleaners. National Super Service Co., Inc., Toledo, Ohio.

Super Saw—Power Saws. RCS Tool Corp., Joliet, Ill.

Super-Set—Gas Conversion Burners. Downing Steel Products Co., Dayton, O.

Super Sioux—Ventilators. Sioux Steel Co., Sioux Falls, S. D.

Super 66—Insulation. Eagle-Picher Co., Cincinnati, Ohio.

Super Slugger—Electric Power Hammers. Noble & Stanton, Inc., Bedford, Ohio.

Super Speed—Mouldings and Trim. Appleton Supply Co., Inc., Appleton, Wis.

Super-Spred—Stokers. Wm. Bros. Boiler & Mfg. Co., Minneapolis, Minn.

Super Steel—Furnaces. The Williamson Co., Cincinnati, Ohio.

Super Suction—Furnace Vacuum Cleaners. National Super Service Co., Inc., Toledo, O.

Super T—Controls. Tork Clock Co., Inc., Mt. Vernon, N. Y.

Supertemp—Insulation. Eagle-Picher Co., Cincinnati, Ohio.

SuperTwist—Dust Recovery Bags. Master-Craft Supply Co., Inc., Haverstraw, N. Y.

Super X—Sheets. Metals Div., Olin Mathieson Chemical Corp., East Alton, Ill.

Supreme—Combustion Chambers. Sandberg Mfg. Co., Portland, Ore.

Supreme—Enamels. Blue Ridge Talc Co., Inc., Henry, Va.

Supreme—Furnaces. Agricola Furnace Co., Inc., Gadsden, Ala.

Supreme—Furnaces. McPherson Furnace & Supply Co., Portland, Ore.

Supreme Everdur—Gas Water Heaters. General Water Heater Corp., Burbank, Calif.

Supreme Steel—Gas Water Heaters. General Water Heater Corp., Burbank, Calif.

Sure Draft—Chimney Tops. H. C. Little Burner Co., Inc., San Rafael, Calif.

Surefit—Ducts, Fittings, Furnace and Smoke Pipe, and Fittings. Henry Furnace Co., Medina, Ohio.

Sure-Foot—Ladder Base. Akron Steel Sales, Inc., Akron, Ohio.

Surety—Roofing Felt. Philip Carey Mfg. Co., Cincinnati, Ohio.
Sureweld—Welding Rod, Welders. National Cylinder Gas Co., Chicago, Ill.
Swanee—Galvanized Shingles. Berger Mfg. Div., Republic Steel Corp., Canton, Ohio.
Swish—Cleaning Compound. Montgomery Chemical Co., Jenkintown, Pa.
Sylphon—Thermostats. Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Knoxville, Tenn.
Symetrex—Waterproofing. A. C. Horn Co., Inc., Long Island City, N. Y.
Synchron—Stoker Controls, Relays, Switches. Industrial Engineering Corp., Terre Haute, Ind.
Synrogear—Motors. U. S. Electrical Motors, Inc., Los Angeles, Calif.

T

Table-Top—Water Heaters. Handley-Brown Heater Co., Jackson, Mich.
Tag—Controls, Hygrometers, Recorders, Psychrometers, Thermometers. Weston Electrical Instrument Corp., Newark, N. Y.
Tamanite—Metal Conditioner. Tamms Industries Inc., Chicago, Ill.
Tamco—Ventilators. Tiffin Art Metal Co., Tiffin, Ohio.
Tam-Putty—Caulking Compound. Tamms Industries Inc., Chicago, Ill.
Tamtex—Paint. Tamms Industries Inc., Chicago, Ill.
Tank-Kleen—Solvent. Celco Corp., New York, N. Y.
Tank-O-Meter—Gauges. Uehling Instrument Co., Paterson, N. J.
Taperlock—Fan & Motor Pulleys. Dodge Mfg. Corp., Mishawaka, Ind.
Tapgun—Portable Electric Tapper. Black & Decker Mfg. Co., Towson, Md.
Tarbestos—Roofing Paint. Philip Carey Mfg. Co., Cincinnati, Ohio.
Teejet—Water Nozzles. Spraying Systems Co., Bellwood, Ill.
Tee Joint—Duct and Duct Accessories. Inland Steel Products Co., Milwaukee, Wis.
Teletrol—Controls. Airgard Mfg. Co., Chicago, Ill.
Tel-Tru—Psychrometers, Thermometers, Air Testing Instruments. E. Vernon Hill & Co., Lake Geneva, Wis.
Temlok—Insulation. Armstrong Cork Co., Lancaster, Pa.
Tempmaster—Thermostats. Crown Controls Co., Inc., New Bremen, Ohio.
Tempoint—Thermometer. Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Temp-R-Izer—Gas Burners. Laharco Industries, Minneapolis, Minn.
Temprobe—Indicating Thermometers. Victory Engineering Corp., Union, N. J.
Tempscribe—Portable Temperature Recorder. Bacharach Industrial Instrument Co., Pittsburgh, Pa.
Tennessee—Sheet Metal Roofing. Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.
Tension-Lap—Roofing Steel. Inland Steel Co., Chicago, Ill.
Tensulate—Insulation. Tennessee Products & Chemical Corp., Nashville, Tenn.
Tefee—Burners, Furnaces. Thermo-Products, Inc., North Judson, Ind.
Tergitol—Cleaning Compounds. Carbide & Carbon Chemicals Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
Texamo—Refractories. A. P. Green Fire Brick Co., Mexico, Mo.

Texan—Water Heaters. Hotstream Heater Co., Cleveland, Ohio.
Texrope—V-Belts. Allis-Chalmers Mfg. Co., Milwaukee, Wis.
TFC—Welding Rod. Tennessee Fabricating Co., Memphis, Tenn.
T-Flo—Dehydrators. Ansul Chemical Co., Refrigeration Div., Marinette, Wis.
Tharco—Furnace Cement. The Armstrong Co., Chicago, Ill.
Thawzone—Dehydrators. Stewart Industries Inc., Clifton, N. J.
Thermador—Fans, Electric Wall Furnaces, Electric Water Heaters, Transformers, Evaporative Air Conditioning Units. Norris-Thermador Corp., Los Angeles, Calif.
Thermaflex—Flexible Duct, Non-metallic Duct Fittings. Flexible Tubing Corp., Guilford, Conn.
Therma-Flo—Furnaces. Kleer-Kleen Mfg. Co., Hayward, Calif.
Thermalfuel—Furnaces. Beck Engineering Combustion Co., St. Louis, Mo.
Thermalite—Paint. Tropical Paint Co., Cleveland, Ohio.
Thermaload—Electrical Relays. The Monitor Controller Co., Div. of Ultrasonic Corp., Cambridge, Mass.
Therm-A-Neered—Controls. Westinghouse Electric Corp., Pittsburgh, Pa.
Thermaster—Furnaces. Thatcher Furnace Co., Garwood, N. J.
Thermidair—Blowers, Furnaces. E. K. Campbell Co., Kansas City, Mo.
Ther-Mist—Nozzles. TOT Towers, Inc., Houston, Tex.
Thermo—Furnaces. American Furnace Co., St. Louis, Mo.
Thermoanemometer—Anemometer. Willson Products, Inc., Reading, Pa.
Thermo-Base—Baseboard Diffusers. Gerwin Industries, Thermo-Base Div., Michigan City, Ind.
Thermobloc—Furnaces. Pratt-Daniel Corp., South Norwalk, Conn.
Thermo-Bord—Non-Metallic Sheets. Philip Carey Mfg. Co., Cincinnati, O.
Thermo-Drip—Humidifier. Automatic Humidifier Co., Cedar Falls, Iowa.
Thermogas—Furnaces. Beck Engineering Combustion Company, St. Louis, Mo.
Thermo-glo—Insulating Cement. National Fuel Conservation Co., Inc., White Plains, N. Y.
Thermograph—Temperature Recorders. Friez Instrument Div., Bendix Aviation Corp., Baltimore, Md.
Thermo-Humidigraph—Humidity Recorders. Bristol Co., Waterbury, Conn.
Thermoil—Furnaces. Beck Engineering Combustion Company, St. Louis, Mo.
Thermoil-Granodine—Coating Chemical for Steel or Iron Surfaces. American Chemical Paint Co., Ambler, Pa.
Thermo Lo—Brazing Flux. Farrelloy Co., Philadelphia, Pa.
Thermopane—Insulated Glass Window Panels. L. O. F. Glass Fibers Co., Toledo, O.
Thermopilot—Controls. General Controls Co., Glendale, Calif.
Thermoseal—Windows. F. C. Russell Co., Cleveland, Ohio.
Thermoswitch—Controls. Fenwal, Inc., Ashland, Mass.
Thermotex B—Insulating Cement, Waterproofing. Philip Carey Mfg. Co., Cincinnati, Ohio.
Therm-otrol—Thermometers. Wheelco Instruments Div., Barber-Colman Co., Rockford, Ill.
Thermowall—Baseboard Diffusers. Ry-niker Steel Products Co., Billings, Mont.
Thin line—Air Conditioning Units. General Electric Co., Major Appliance

Div., Room Air Conditioner Dept., Louisville, Ky.
Thin-Man—Registers. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.
Third-Way—Air Conditioning Units. Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.
Thorobred—V Belts. Dayton Rubber Co., Dayton, O.
Three-Phase—Welders. Sciaky Bros., Chicago, Ill.
370 Special—Paints. Thompson & Co., Oakmont, Pa.
Thulman—Prefabricated Chimneys. Chimney Sales Corp., Washington, D. C.
Thunder-Core—Hammer bits. New England Carbide Tool Co., Inc., Cambridge, Mass.
Thunder-Twist—Carbide Tipped Bits, Chuck Wrenches. New England Carbide Tool Co., Inc., Cambridge, Mass.
Ti-Co—Sheets. Inland Steel Co., Chicago, Ill.
Time-O-Switch—Time Switches. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Timeroid—Time Switches. Mercoid Corp., Chicago, Ill.
Timerelay—Relays. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.
Ti-Namel—Vitreous Enameling Alloy Steel Sheets. Inland Steel Co., Chicago, Ill.
Tin-Ezy—Flux. Johnson Mfg. Co., Inc., Mount Vernon, Ia.
Tinezy—Solder. Farrelloy Co., Inc., Philadelphia, Pa.
Tinner's Red—Paint. Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Tinol—Soldering Flux. American Solder & Flux Co., Philadelphia, Pa.
Tite-Lite—Caulking Compound. Truscon Laboratories, Detroit, Mich.
Titelock—Duct and Duct Accessories. Inland Steel Products Co., Milwaukee, Wis.
Titesal—Furnace Cement. Radiator Specialty Co., Charlotte, N. C.
Toastmaster—Electric Water Heaters. McGraw Electric Co., Clark Div., Chicago, Ill.
Tobin Bronze—Plates and Welding Rod. American Brass Co., New York, N. Y.
Tocoseal—Roof Cement. Tropical Paint Co., Cleveland, Ohio.
Tool Line—Grinders. Brown-Brockmeyer Co., Inc., Dayton, O.
Toolmaster—Sheet Metal Working Machines. Fidelity Tool Supply, Inc., Camden, N. J.
Topeal—Sheet Metal Fastenings. Fabricated Products Co., West Newton, Pa.
Torchweld—Torches. National Cylinder Gas Co., Chicago, Ill.
Toridair—Furnaces. Fraser and Johnston Co., San Francisco, Calif.
Toridmaster—Conversion Burners. Modern Controls Corporation, Centerline, Mich.
Torkmaster—Switches. Tork Clock Co., Inc., Mt. Vernon, N. Y.
Torkotherm—Thermostats. Tork Clock Co., Inc., Mt. Vernon, N. Y.
Tornado—Furnace Vacuum Cleaners. Breuer Electric Mfg. Co., Chicago, Ill.
Torrid—Soldering Furnaces. J. D. Polis Mfg. Co., Chicago, Ill.
Torrid Zone—Furnaces. Lennox Industries, Inc., Marshalltown, Iowa.
Totalume—Aluminum Paint. Wilbur & Williams Co., Brighton, Mass.
Totrust—Paints, Enamels. Wilbur & Williams Co., Brighton, Mass.
Town & Country—Air Conditioning Units, Furnaces. Conco Engineering Works, Mendota, Ill.

Trace—Leak Detectors. Stewart Industries Inc., Clifton, N. J.

Tramrail—Hoists, Monorails. Cleveland Crane & Engineering Co., Wickliffe, Ohio.

Transite—Asbestos Duct, Asbestos Sheet. Johns-Manville, New York, N. Y.

Transitop—Non-Metallic Sheets. Johns-Manville, New York, N. Y.

Transparent—CO₂ Analyzers. F. W. Dwyer Mfg. Co., Michigan City, Ind.

Trapit—Fuel Oil Filters. A-P Controls Corp., Milwaukee, Wis.

Trentweld—Steel Tubing. Crucible Steel Co. of America, Pittsburgh, Pa.

Tribloc—Hoists. Ford Chain Block Div., American Chain and Cable Co., Inc., York, Penn.

Tridene—Metal Cleaner. E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

Trico—Draft Diverters, Furnaces, Duct and Duct Accessories, Furnace Pipe and Fittings. Tri-State Heating Supply Inc., Fort Wayne, Ind.

Tri-Flex—Grilles, Registers. Tuttle & Bailey, Inc., New Britain, Conn.

Tri-Flux—Soldering Flux. Wolfe-Kote Co., Sheboygan, Wis.

Trimatic—Gas Burner Pilots. Lowell & Grayson Mfg. Co., Monrovia, Calif. Appleton, Wis.

Tripl-Aire—Registers and Grilles. Hart & Cooley Mfg. Co., Holland, Mich.

Triple A—Paints. Quigley Co., Inc., New York, N. Y.

Triple-Lok—Copper Tube Fittings. Parker Appliance Co., Cleveland, Ohio.

Triplife—Furnaces. Williamson Heater Co., Cincinnati, Ohio.

Tripl-Lock—Roofing Nails. The Deniston Co., Chicago, Ill.

Triumph—Water Heaters. Koil-Les Heater Co., Geneva, Ill.

Tro-Laure—Wall Furnaces. San Carlos Mfg. Co., San Carlos, Calif.

Tropicalk—Caulking Compounds. Tropical Paint Co., Cleveland, Ohio.

Tropic Breeze—Furnaces. Dalzen Mfg. Co., St. Clair, Mich.

Tru-Cut—Snips and Shears. J. Cartwright & Son, Malaga, Calif.

True-Spot—Smoke Testers. Bacharach Industrial Instrument Co., Pittsburgh, Pa.

Truflex—V Belts. Gates Rubber Co., Denver, Colo.

Truflex—Solder. General Plate Div., Metals & Controls Corp., Attleboro, Mass.

Truliradiant—Gas Burners. Sullivan Valve & Engineering Co., Butte, Mont.

Trunkline—Ducts and Duct Fittings. Norwalk Air Conditioning Corp., South Norwalk, Conn.

Truscon—Windows. Republic Steel Corp., Cleveland, O.

Trussteel—Damper Clips. U. S. Register Co., Battle Creek, Mich.

Tub-Caulk—Caulking Compounds. Miracle Adhesives Corp., New York, N. Y.

Tube-O-Flux—Flux, Solder. American Products Corp., Chicago, Ill.

Tuf-Flex—Hack Saw Blades. Millers Falls Co., Greenfield, Mass.

Tuff-Weld—Insulation Fastenings. Goodloe E. Moore, Inc., Danville, Ill.

Turbine Rotary—Ventilators. Western Engineering & Manufacturing Co., Los Angeles, Calif.

Turbo—Air Washers. Bayley Blower Company, Milwaukee, Wis.

Turbo-Base—Ventilators. Uno Ventilator Co., Malden, Mass.

Turbovane—Blowers. Westinghouse Electric Corp., Sturtevant Div., Boston, Mass.

TWC Weather Control—Controls. Tork Clock Co., Mt. Vernon, N. Y.

Twin Contact—Controls. Pertex Corp., Milwaukee, Wis.

Twin-Fyr—Oil Burner. Breeze Corps., Inc., Newark, N. J.

Two-Drain—Steel Roofing. Inland Steel Products Co., Milwaukee, Wis.

Two-Tank-T—Fuel Filters. Robert Barclay, Inc., Chicago, Ill.

Tygon—Metal Protecting Paint. United States Stoneware Co., New York, N. Y.

Tyl-Lyke—Steel Roofing and Siding. Continental Steel Corp., Kokomo, Ind.

Tymotherm—Thermostats. Tork Clock Company, Inc., Mount Vernon, N. Y.

U

Uclon—Sheet Metal Paint. United Chromium, Inc., New York, N. Y.

U-G-L—Furnace Cement. United Gilsontite Laboratories, Scranton, Pa.

Ultralite—Duct and Furnace Insulation. Gustin-Bacon Mfg. Co., Kansas City, Mo.

UMCO—Furnaces. Union Mfg. Co., Boyertown, Pa.

Unarco—Air Conditioning Units, Coils, Cooling Towers, Union Asbestos & Rubber Co., Chicago, Ill.

Unichrome—Sheet Metal Paint. United Chromium, Inc., New York, N. Y.

Uniclosed—Motors. U. S. Electrical Motors, Inc., Los Angeles, Calif.

Unicoil—Air Conditioning Units. Clarage Fan Co., Kalamazoo, Mich.

Unicon—Refrigerating Condensers. Kramer Trenton Co., Trenton, N. J.

Unifil—Insulation. Robinson Insulation Co., Great Falls, Mont.

Unifilter—Fuel Oil Filters. General Filters, Inc., Novi, Mich.

Uni-Flo—Grilles, Registers & Air Diffusers. Barber-Colman Co., Rockford, Ill.

Uniflow—Furnaces. Williams Furnace Co., Buena Park, Calif.

Unimatic—Insulation Blowing Machines. Universal Insulating Co., Van Wert, O.

Unimatic—Welding Rod. Eutectic Welding Alloys Corp., Flushing, N. Y.

Unishear—Portable Electric Shears. Stanley Electric Tool Div., Stanley Works, New Britain, Conn.

Unisorb—Bases and Pads. Felters Co., Boston, Mass.

Unitaire—Air Conditioning Units. Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.

Unitaire—Gas Furnaces. Hammel Radiator Eng. Co., Los Angeles, Calif.

Unitherm—Air Conditioning Units. Clarage Fan Co., Kalamazoo, Mich.

Uni-Tile—Combustion Chambers. Insulation & Refractories Co., Williamson, N. Y.

UniTrane—Air Conditioning Units. The Trane Co., LaCrosse, Wis.

Universal—Angle Benders. Hossfeld Mfg. Co., Winona, Minn.

Universal—Electric Tools. Chicago Pneumatic Tool Co., New York, N. Y.

Universal—Waterproofing. Philip Carey Mfg. Co., Cincinnati, Ohio.

Universal—Furnaces. Cory Mfg. Co., Greensburg, Pa.

Uni-wash—Blow Pipe Collectors. Newcomb-Detroit Co., Detroit, Mich.

usAIRco—Air Conditioning Units, Blowers and Blower-Filter Units, Coils, Grilles, and Blower Wheels. United States Air Conditioning Corp., Minneapolis, Minn.

U-Set—Snips and Shears. W. H. Compton Shear Co., Newark, N. J.

USG—Built-Up Roofing and Roof Cement and Paint. United States Gypsum Co., Chicago, Ill.

USRC—Registers, Damper Regulators. United States Register Co., Battle Creek, Mich.

USS—Steel Products. National Tube Co., Pittsburgh, Pa.; Tennessee Coal and Iron Div., Fairfield, Ala.; United States Steel Corp., Pittsburgh, Pa.

Utilaire—Furnaces. Berger Furnace Corp., Belle Vernon, Pa.

Utility—Fan Ventilator. Arex Co., Chicago, Ill.

U Tube—Water Heaters. Handley Brown Heater Co., Jackson, Mich.

V

Vacu-Flo—Steel Tubing. H-P Products, Inc., Louisville, O.

Valcalox—Damper Regulators. Young Regulator Co., Cleveland, Ohio.

Valdura—Caulking Compounds, Paint. American-Marietta Co., Chicago, Ill.

Valley Forge—Cement. Ehret Magnesia Mfg. Co., Valley Forge, Pa.

Valvent—Ventilators. Swartwout Co., Cleveland, Ohio.

Vanco—Flashing, Skylights and Ventilators. E. Van Noorden Co., Boston, Mass.

Van-Cor—Plastic Ducts, Sheets, Tubing. Colonial Plastics Mfg. Co., Subsidiary Van Dorn Iron Works Co., Cleveland, O.

Vapco—Cleaning Compounds. Garman Co., Inc., St. Louis, Mo.

Vapoglas—Evaporative Humidifiers. Skuttel Mfg. Co., Milford, Mich.

Vaporene—Water Conditioning Compound. Metropolitan Refining Co., Inc., Long Island City, N. Y.

Vaporite—Humidifiers. Automatic Humidifier Co., Cedar Falls, Iowa.

Vapor-Oil—Burners and Furnaces. Metro Metal Mfg. Co., Holt, Mich.

Vaporseal—Vapor Barriers. Angier Corp., Framingham, Mass.

Vardrive—Motors, Transmissions. U. S. Electrical Motors, Inc., Los Angeles, Calif.

Vari-Pitch—Speed Changers. Allis-Chalmers Mfg. Co., Milwaukee, Wis.

Vaultmaster—Air Conditioning Units. Walter Haertel Co., Minneapolis, Minn.

V.B.—Building Insulation. Barrett Div., Allied Chemical & Die Corp., New York, N. Y.

V-Crimp—Roofing. Inland Steel Products Co., Milwaukee, Wis.

Veco—CO₂ Analyzers. Victory Engineering Corp., Union, N. J.

Veelos—V-Belts. Manheim Mfg. & Belting Co., Manheim, Pa.

Velometer—Air Velocity Meters. Illinois Testing Laboratories, Inc., Chicago, Ill.

Ventalarm—Fuel Tank Signal Gauge. Scully Signal Co., Melrose, Mass.

Ventbestos—Flexible Duct Connections. Ventfabrics, Inc., Chicago, Ill.

Ventdome—Roof Ventilators. Wasco Products, Inc., Cambridge, Mass.

Ventfab—Flexible Duct Connections. Ventfabrics, Inc., Chicago, Ill.

Ventglas—Flexible Duct Connections. Ventfabrics, Inc., Chicago, Ill.

Ventura—Fans, Ventilators. American Blower Corp., Detroit, Mich.

Venturette—Roof Ventilators. Uno Ventilator Co., Malden, Mass.

Venturi-Flo—Air Diffusers, Ceiling Ven-

tilators. Barber-Colman Co., Rockford, Ill.

Venturi-Top—Roof Ventilators, Chimney Caps and Tops, Vent Caps. Walker Mfg. & Sales Corp., St. Joseph, Mo.

Ventvinyl—Flexible Duct Connections. Ventfabrics, Inc., Chicago, Ill.

Vermiculite—Insulation. International Vermiculite Co., Girard, Ill.

Vernois—Furnace Repair Parts. Mt. Vernon Furnace and Mfg. Co., Mt. Vernon, Ill.

Vernon—Furnaces. Berger Furnace Corp., Belle Vernon, Pa.

Versat-all—Furnaces. Peerless Furnace and Foundry Co., Indianapolis, Ind.

Vertex—Caulking Compounds, Waterproofing, Paint. J. C. Whitlam Mfg. Co., Wadsworth, O.

Vibra-Cork—Vibration Isolating Bases. Korfund Co., Inc., Long Island City, N. Y.

Vibraglass—Vibration Isolating Bases and Pads. L. O. F. Glass Fibers Co., Toledo, O.

Vibra Grate—Stokers. American Engineering Co., Philadelphia, Pa.

Vibrex—Vibration Isolating Equipment. General Tire & Rubber Co., Industrial Products Div., Wabash, Ind.

Vibro-Insulators—Vibration Isolating Pads. B. F. Goodrich Co., Akron, Ohio.

Vibro-Isolator—Vibration Isolating Bases. Korfund Co., Inc., Long Island City, N. Y.

Victor—Blower-Filter Units, Furnaces, Oil Burners, Stokers. Hall-Neal Furnace Co., Indianapolis, Ind.

Victorgas—Gas Furnaces. Hall-Neal Furnace Co., Indianapolis, Ind.

Victorol—Oil Furnaces. Hall-Neal Furnace Co., Indianapolis, Ind.

Victory—Registers. Register & Grille Mfg. Co., Inc., Brooklyn, N. Y.

Vikimatic—Furnaces, Water Heaters. Viking Manufacturing Corp., Cleveland, Ohio.

Viking—Arc Welders. Mid-States Welder Mfg. Co., Chicago, Ill.

Vincul—Rust Remover. Protective Coatings, Inc., Detroit, Mich.

Visafame—Oil Burner Controls. Mercoind Corp., Chicago, Ill.

Vise-Grip—Clamps. Petersen Mfg. Co., Inc., DeWitt, Nebr.

Visi-Draft—Draft Indicating Gages. F. W. Dwyer Mfg. Co., Michigan City, Ind.

Vital-Calker—Caulking Guns. Vital Products Mfg. Co., Cleveland, O.

Vitcote—Metal Protective Coating. Allied Porcelain, Inc., Waukegan, Ill.

Vitricel—Furnace Cement. Philip Carey Mfg. Co., Cincinnati, Ohio.

Vit-Rock—Water Heaters. Coleman Co., Inc., Wichita, Kans.

Vitro Flame—Oil Burners. Kresno-Stamm Mfg. Co., Palisades Pk., N. J.

Vitroliner—Prefabricated Chimneys, Chimney Linings, Vent and Flue Pipe and Fittings. Condensation Engineering Corp., Chicago, Ill.

Volocitrol—Air Control Vanes. Barber-Colman Co., Rockford, Ill.

Vornado—Fans, Motors, Furnaces, Air Conditioning Units. O. A. Sutton Corp., Wichita, Kans.

Vortex—Oil Burners. Iron Fireman Mfg. Co., Cleveland, Ohio.

V & S Drive—Variable Speed Transmissions. Reliance Electric & Engineering Co., Cleveland, O.

V & S Jr.—Variable Speed Transmissions. Reliance Electric & Engineering Co., Cleveland, O.

Vulcan—Stokers. Canton Stoker Corp., Canton, Ohio.

Vulcanite—Felt Roofing, Roofing Cement.

Certain-teed Products Corp., Ardmore, Pa.

Vulcatex—Caulking and Glazing Compounds. A. C. Horn Co., Inc., Long Island City, N. Y.

Vulco—V-Belts and Pulleys. Gates Rubber Co., Denver, Colo.

Vulcomount—Pulleys. Gates Rubber Co., Denver, Colo.

W

W—Sheets. Wheeling Corrugating Co., Wheeling, W. Va.

Warehouser—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.

Warmahl—Furnaces. Major Metal Products, Inc., Los Angeles, Calif.

Wascolite—Roof Ventilators. Wasco Products, Inc., Cambridge, Mass.

Wascolite Skydome—Skylights. Wasco Products, Inc., Cambridge, Mass.

Washington Frugal—Water Heaters. Gray & Dudley Co., Nashville, Tenn.

Water-Air—Gas Water Heaters. Handley-Brown Heater Co., Jackson, Mich.

Waterbase—Furnaces. Farris Furnace Co., Springfield, Ill.

Water-Boy—Humidifier Valves. Maid-O'-Mist, Inc., Chicago, Ill.

Waterbury—Oil Burners. Furnaces, Waterman-Waterbury Co., Minneapolis, Minn.

Waterfoil—Waterproofing. A. C. Horn Co., Long Island City, N. Y.

Waterloo Airfoil—Grilles, Louvers, Registers. Titus Manufacturing Corporation, Waterloo, Iowa.

Water-RAY-trol—Oil-fired Water Heater. Ray Oil Burner Co., San Francisco, Calif.

Waterseal—Cement. Thompson & Co., Oakmont, Pa.

Waterspar—Enamels and Lacquers. Pittsburgh Plate Glass Co., Pittsburgh, Pa.

Watertender—Humidifier Valves. Skuttle Mfg. Co., Milford, Mich.

Wa-Trol—Duct Damper Regulators. Thermal Agency, Houston, Tex.

WAW—Tools. W. A. Whitney Mfg. Co., Rockford, Ill.

Weathercaster—Controls. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

Weather-Chrome—Time Switches. Automatic Devices Co., Inc., Western Springs, Ill.

Weather-Flo—Controls. Automatic Devices Co., Inc., Western Springs, Ill.

Weatherlok—Fans. Ventrola Mfg. Co., Owosso, Mich.

Weathermaker—Air Conditioning Units. Carrier Corp., Syracuse, N. Y.

Weather-Man—Weather Compensating Thermostats. Automatic Devices Co., Inc., Western Springs, Ill.

Weath-R-Seal Washers—Sheet Metal Fastenings. Fabricated Products Co., West Newton, Pa.

Wedgbelt—Belts. American Pulley Co., Philadelphia, Pa.

Wedg-Tite—Pulleys. American Pulley Co., Philadelphia, Pa.

Weir—Furnaces, Stokers. Meyer Furnace Co., Peoria, Ill.

Weircoloy—Copper Bearing Galvanized Sheets. Weirton Steel Co., Weirton, W. Va.

Weircote—Lead Sheets. Weirton Steel Co., Weirton, W. Va.

Weirite—Tin Plate. Weirton Steel Co., Weirton, W. Va.

Weirzin—Electrolitic Zinc Coated Sheets. Weirton Steel Co., Weirton, W. Va.

Weisco—Skylight Lifts. H. Weiss & Co., New York, N. Y.

Weldmaster—Brazeing Torches. Modern Engineering Co., St. Louis, Mo.

Weld-o-trol—Spot Welders. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

Wesco—Oil Burners, Furnaces. Northwest Foundry & Furnace Co., Portland, Ore.

Western—Blowers, Direct Fired Heaters, Furnaces. International Sales Co., San Francisco, Calif.

Western—Water Heaters. W. B. Bastian Mfg. Co., Los Angeles, Calif.

Westernaire—Fans. Western Engineering & Mfg. Co., Venice, Calif.

Western Airout—Roof Ventilators. Western Engineering & Mfg. Co., Venice, Calif.

Western Ridge—Roof Ventilators. Western Engineering & Mfg. Co., Venice, Calif.

Western Rotary—Roof Ventilators. Western Engineering & Mfg. Co., Venice, Calif.

Weathermatic—Air Conditioning Units. The Williamson Co., Cincinnati, O.

Wetol—Soldering Flux. Farrelloy Co., Inc., Philadelphia, Pa.

Wet Wing—Furnace Humidifiers. Illinois Iron & Bolt Co., Carpentersville, Ill.

Wevelite—Insulation. Insulite Div., Minnesota and Ontario Paper Co., Minneapolis, Minn.

Whip Clamp—Clamping Device. Whipple Sheet Metal Works, Inc., Lansing, Mich.

Whippet—Hoists. Ford Chain Block Div. American Chain & Cable Co., Inc., York, Pa.

Whirlcone—Spray Nozzles. Water Cooling Equipment Corp., St. Louis, Mo.

Whirljet—Water Nozzles. Spraying Systems Co., Bellwood, Ill.

Whirlout—Ventilators. Swartwout Co., Cleveland, Ohio.

White Top—Roofing Felt. Johns-Manville, New York, N. Y.

Whitney-Jensen—Sheet Metal Working Machinery and Tools. Whitney Metal Tool Co., Rockford, Ill.

Wiechert—Furnaces. St. Clair Foundry Corp., Centralia, Ill.

Wigwam—Chimney Caps and Tops. Boston Machine Works Co., Lynn, Mass.

Wilson—Arc Welders. Air Reduction Sales Co., New York, N. Y.

Wilson—Furnace Brushes. Worcester Brush & Scraper Co., Worcester, Mass.

Wind Electric—Roof Ventilators. Hirschman-Pohle Co., Inc., LeRoy, N. Y.

Windial—Anemometers. Friez Instrument Div. Bendix Aviation Corp., Baltimore, Md.

Windmaker—Fans. Rich Fan Mfg. Co., Phil, Houston, Tex.

Windmaster—Exhausters. Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.

Wind-O-Cool—Fans. Belco Industries, Inc., St. Louis, Mo.

Wind-O-Vent—Fans. Diehl Manufacturing Company, Somerville, N. J.

Wind-O-Vent—Ventilator Units. Reed Unit-Fans, Inc., New Orleans, La.

Wingfoil—Fans, Ventilators. L. J. Wing Mfg. Co., Linden, N. J.

Winkler—Furnaces, Air Conditioning Units. Oil & Gas Burners, Water Heaters, Stokers. Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.

Winter-Chaser—Furnaces, Direct Fired Heaters. Campbell Heating Co., Des Moines, Iowa.

Winter King—Furnaces. McPherson Furnace & Supply Co., Portland, Ore.

Wise—Furnaces. Sheet Metal Mfg. Co., Youngstown, O.

Wizard—Furnaces. Agricola Furnace Co., Inc., Gadsden, Ala.
W.O. No. 1—Rust Preventive Chemicals. Turco Products, Inc., Los Angeles, Calif.
Wolfe—Angle Meter, Center Finders, Circle Meter, Divisor, Protractor. Interstate Sales Co., New York, N. Y.
Wondaire—Furnaces. Cox Mfg. Co., Ridgeville, Ind.
Wonder Bender—Portable hand brake. Elgen Mfg. Corp., Long Island City, N. Y.
Wonderglas—Water Heaters. Buckeye Water Heater Co., Cleveland, O.
Woolfelt—Duct Insulation. Norristown Magnesia & Asbestos Co., Norristown, Pa.
Woolmaster—Blowers. Molloy Machine Corp., Chicago, Ill.
Worksaver—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.
Wormfeed—Stokers. Canton Stoker Corp., Canton, Ohio.
WR—Controls. White-Rodgers Electric Co., St. Louis, Mo.
Wyco—Flexible Shaft Machines. Wyzenbeek & Staff, Inc., Chicago, Ill.
Wycoflex—Grinder. Wyzenbeek & Staff, Inc., Chicago, Ill.

X

Xcel-Flux—Soldering Flux. American Products Corp., Chicago, Ill.
Xit—Ventilators. Iona Ventilator Co., Inc., Philadelphia, Pa.
X-Pandoseal—Transparent Waterproofing. X-Pando Corp., Long Island City, N. Y.
Xyron—Welding Rod. Eutectic Welding

Alloys Corp., Flushing, N. Y.

Y

Yager's—Flux and Solder. Alex R. Benson Co. Inc., Hudson, N. Y.
Yale—Water Heaters. W. B. Bastian Mfg. Co., Los Angeles, Calif.
Yankee—Damper Clips and Tips. Howes-Woods Company, Cambridge, Mass.
Yard King—Warehouse Trucks. Yale & Towne Mfg. Co., Philadelphia, Pa.
YarWay—Nozzles. Yarnall-Waring Co., Philadelphia, Pa.
Yoloy—Plates and Sheets. Youngstown Sheet & Tube Co., Youngstown, Ohio.
York-Heat—Conversion Burners. Furnaces, Water Heaters. York-Shipley, Inc., York, Pa.
Yorkaire—Air Conditioning Units. York Corp., York, Pa.
YouBert—Collectors and Blow Pipe Fittings. Young & Bertke Co., Cincinnati, Ohio.

Z

Zaponite—Sheet Metal Paint. Atlas Powder Co., North Chicago, Ill.
Zarko—Fan and Motor Pulleys. Replacement Parts, Inc., Euclid, O.
Zeph-Air—Gas Furnace. XXth Century Heating & Ventilating Co., Akron, Ohio.
Zephair—Fans. Hunter Fan & Ventilating Co., Inc., Memphis, Tenn.
Zephyr—Furnaces. Premier Furnace Co., Dowagiac, Mich.
Zephyr—Humidifiers. Maid-O'-Mist, Inc., Chicago, Ill.
Zephyr—Saws. DoAll Company, Minne-

apolis, Minn.

Zero—Cement and Refractories. Standard Fuel Engineering Co., Detroit, Mich.
Zerok—Waterproofing. Atlas Mineral Products Co., Mertztown, Pa.
Zerolite—Insulation. Johns-Manville, New York, N. Y.
Zilloy—Zinc Roofing and Sheets. New Jersey Zinc Co., New York, N. Y.
Zinaloy—Gutters, Conductor Pipe and Fittings. Ridge Roll, Roofing, Sheets, Moulding and Trim, Shingles and Tile. Matthiessen & Hegeler Zinc Co., La-Salle, Ill.
Zincoater—Paint. Tropical Paint Co., Cleveland, O.
Zincgrip—Metal Sheets. Armco Steel Corp., Middletown, Ohio.
Zincilate—Waterproofing. Industrial Metal Protectives, Dayton, O.
Zinodine—Corrosion-preventive and paint bonding chemical. American Chemical Paint Co., Ambler, Pa.
Zip—Portable Spot Welders. Mid-States Welder Mfg. Co., Chicago, Ill.
Zip Air—Air Conditioning Units. Trade-Wind Motorfans, Inc., Rivera, Calif.
Zip-Tin—Flux. Tinit Mfg. Co., Inc., Denver, Colo.
Zip-Tite—Flux. Tinit Mfg. Co., Inc., Denver, Colo.
Zone Air—Air Conditioning Units. Payne Div. of Carrier Corp., Monrovia, Calif.
Zonolite—Insulation. Robinson Insulation Co., Great Falls, Mont.
Zonolite Brand—Insulation. Western Metal Products Co., Minneapolis, Minn.
Z Seal—Bearings. Shafer Bearing Div., Chain Belt Co., Downers Grove, Ill.

Section of American Artisan

1956 DIRECTORY OF WARM AIR HEATING, RESIDENTIAL AIR CONDITIONING AND SHEET METAL PRODUCTS

[Part 4—ALL MANUFACTURERS' ADDRESSES]

A

A & A Register Co., 8527 Clinton Rd., Cleveland 9, Ohio.
 ACEC Electric Corp., 40 E. 49th St., New York 17, N. Y.
 A-J Mfg. Co., 3601 E. 18th St., Kansas City 27, Mo.
 AMIC Mfg. Corp., 21-25 44th Ave., Long Island City 1, N. Y.
 A-P Controls Corp., 2450 N. 32nd St., Milwaukee 45, Wis.
 Abbeon Supply Co., 179-21 Jamaica Ave., Jamaica 32, N. Y.
 Acadia Synthetic Products Div., Western Felt Wks., 4115 Ogden Ave., Chicago, Ill.
 Accurate Sheet Metal & Mfg. Works, 2336-40 Milwaukee Av., Chicago 47, Ill.
 Ace Co., 112 W. Washington St., P. O. Box 1212, Ocala, Fla.
 Acer & Whedon, Inc., Commercial St., Medina, N. Y.
 Acet-A-Tips Co., 5069 W. Madison St., Chicago 44, Ill.
 Ackermann Mfg. Co., Wheeling, W. Va.
 Acme Asbestos Covering & Flooring Co., 222 Elizabeth St., Chicago 7, Ill.
 Acme Elec. Corp., 81 Water St., Cuba, N. Y.
 Acme Electric Welder Co., 2618 Fruitland Ave., Los Angeles 58, Calif.
 Acme Equipment Co., Inc., 126 S. Clinton St., Chicago 6, Ill.
 Acme Equipment Co. of Oklahoma, Inc., Muskogee, Okla.
 Acme Furnace Fitting Co., 844 W. 59th St., Chicago 21, Ill.
 Acme Heat & Power Inc., 318 Ten Eyck St., Brooklyn 6, N. Y.
 Acme Industries, Inc., Mechanic & Ganson Sts., Jackson, Mich.
 Acme Mfg. Co., 7500 State Rd., Philadelphia 36, Pa.
 Acme Oil Burner Co., Inc., 210 Third Av. S. W., Cedar Rapids, Iowa.
 Acme Roof Jacket Co., 411 Plymouth Ave., Minneapolis, Minn.
 Acme Steel Co., 2840 Archer Ave., Chicago 8, Ill.
 Acro Tool & Die Works, 4554 Broadway, Chicago 40, Ill.
 Acro Welder Mfg. Co., 1719 W. St. Paul Ave., Milwaukee 3, Wis.
 Adams Co., The, Bridge St., Dubuque, Iowa.
 Adams Mfg. Co., 1530 St. Clair Ave., Cleveland 14, O.
 Addison Products Co., Addison, Mich.
 Adelta Mfg. Co., 21st & Ellsworth Sts., Philadelphia 46, Pa.
 Admiral Corp., 3800 W. Cortland St., Chicago 47, Ill.
 Advance Aluminum Castings Corp., 2742 W. 36th Pl., Chicago 32, Ill.
 Advance Furnace Co., 2300 E. Douglas, Wichita 7, Kans.
 AEMCo. Inc., 10 State St., Mankato, Minn.
 Aerofin Corp., 101 Greenway Ave., Syracuse 1, N. Y.
 Aeroil Products Co., Inc., 69 Wesley St., South Hackensack, N. J.
 Aeroquip Corp., 300 S. East Ave., Jackson, Mich.
 Aerotec Corp., The, Greenwich, Conn.
 Aerovent Fan Co., Inc., Ash and Barton Sts., Piqua, Ohio.
 Agat-Detroit Co., 606 First National Bldg., Ann Arbor, Mich.
 Agricola Furnace Co., Inc., North 12th St., Gadsden, Ala.
 Ahlberg Bearing Co., 3012 W. 47th St., Chicago 32, Ill.
 Air Conditioning Engineering Co., 44 First St., Cambridge 41, Mass.
 Air Conditioning Equipment Co., 301 N. 7th St., Minneapolis 3, Minn.
 Air Control Products, Inc., Coopersville, Mich.
 Air Controls, Inc., 2310 E. Superior Av., Cleveland 14, Ohio.
 Air Cooling Engineering Co., Box 744, Evanston, Ill.
 Air Devices, Inc., 185 Madison Ave., New York 16, N. Y.
 Air Distribution Products Co., 116 S. LaBrea Ave., Los Angeles 36, Calif.
 Aireactor Corp., 22 E. 40th St., New York 16, N. Y.
 Aireflo Furnace Pipe Co., 750 Rickett Rd., Brighton, Mich.

Air Equipment Co., Inc., 1713 W. Carroll Ave., Chicago 12, Ill.
 Air-Factors, Inc., 1624 S. Raymond Ave., Monrovia, Calif.
 Airfan Engineering Co., 7401 Anaheim-Telegraph Rd., Los Angeles 22, Calif.
 Air Filter Corp., 108 N. Water St., Milwaukee 2, Wis.
 Airflame, 648 McAlister Av., Waukegan, Ill.
 Airfloor of America, 8620 Otis St., South Gate, Calif.
 Airgard Mfg. Co., 362 W. Erie St., Chicago 10, Ill.
 Airguide Instrument Co., 2210 Wabansia Ave., Chicago 47, Ill.
 Air-Heat Corp., 4535 W. Washington Blvd., Chicago 24, Ill.
 Airjet Ventilator Co., 5420 N. Peck Rd., El Monte, Calif.
 Airmaster Corp., 4317 Ravenswood Av., Chicago 13, Ill.
 Air-Maze Corp., 25000 N. Miles Rd., Cleveland 28, O.
 Air-Net Appliance Corp., 1340 E. 55th St., Chicago 15, Ill.
 Air-O-Blind Metal Awning Co., Inc., 3615 S. Central, Phoenix, Ariz.
 Airoflo Engineering Co., 3777 Cahuenga Blvd., North Hollywood, Calif.
 Air-Path Products Co., 4620 Doll Ave., Baltimore 15, Md.
 Air Products, 407 N. Eleventh St., St. Louis 1, Mo.
 Air Products, Emmaus, Pa.
 Air Purification Service, Inc., 136 Liberty St., New York, N. Y.
 Air Reduction Sales Co., 60 E. 42nd St., New York 17, N. Y.
 Air & Refrigeration Corp., 439 Madison Ave., New York 22, N. Y.
 Air-Speed Tool Co., 1502 W. Slauson Av., Los Angeles 47, Calif.
 Air Stream Filter Corp., 2100 Washington Av., St. Louis 3, Mo.
 Air Supplies, Inc., 138 Water St., South Norwalk, Conn.
 Airtemp Div., Chrysler Corp., 1600 Webster St., Dayton 1, Ohio.
 Airtherm Mfg. Co., 706 S. Spring Ave., St. Louis 10, Mo.
 Airtron Corp., Holland, O.
 Air-Vacuum Div., F. J. Littell Machine Co., 4555 N. Ravenswood Ave., Chicago 40, Ill.
 Airwasher Corp., Eaton Rapids, Mich.
 Ajax Building Bracket Co., 1551 Rydal-Mount Rd., Cleveland Heights 18, Ohio.
 Ajax Furnace Fitting Co., Div., Cincinnati Sheet Metal & Roofing Co., 216 E. Front St., Cincinnati 2, Ohio.
 Akeley-Steele Co., 225 Galena Blvd., Aurora, Ill.
 Alabama Metal Lath Co., P. O. Box 992, Birmingham, Ala.
 Aladdin Heating Corp., 1111 West Ave. 137, San Leandro, Calif.
 Aladdin Mfg. Co., 3125 Harrison, Kansas City, Mo.
 Albertson & Co., Inc., Sioux City 3, Iowa.
 Alco Valve Co., 865 Kingsland Av., St. Louis 5, Mo.
 Aldrich Co., Wyoming, Ill.
 Alexander Brothers Belting Co., 406 N. 3rd St., Philadelphia 23, Pa.
 Alfoll Div., Reflectal Corp., 155 E. 44th St., New York 17, N. Y.
 Allan Engineering Co., Box 1211, Dallas 1, Texas.
 Allegheny Body Co., Inc., 1633 N. Sixth St., Philadelphia, Pa.
 Allegheny Ludlum Steel Corp., 2020 Oliver Bldg., Pittsburgh 22, Pa.
 Allen, H. D., 3201 Casitas Ave., Los Angeles 39, Calif.
 Allen-Bradley Co., 1335 S. First St., Milwaukee 4, Wis.
 Allen Co., Inc., L. B., 6719 Bryn Mawr Ave., Chicago 31, Ill.
 Allen Cooler & Ventilator Inc., 704 Woodward, Rochester, Mich.
 Allen Industries, Alva, 1001-1015 N. 3rd St., Clinton, Mo.
 Allen Mfg. Co., Inc., Nashville 1, Tenn.
 Allen Stoker Co., 235 S. Penn St., Allentown, Pa.
 All-Gas Equipment Co., 3235 N. 31st St., Milwaukee 10, Wis.
 Allied Federal Industries, 14 Mitchell Pl., Newark, N. J.

Allied Porcellain, Inc., Waukegan, Ill.
 Allis-Chalmers Mfg. Co., P. O. Box 512, Milwaukee 1, Wis.
 Allis Co., Louis, 427 Stewart St., Milwaukee 7, Wis.
 Allmetal Screw Products Co., Inc., Garden City, N. Y.
 Allmetal Weatherstrip Co., 2241 N. Knox Av., Chicago 39, Ill.
 Alloy Surfaces Co., 1115 N. 38th St., Philadelphia 4, Pa.
 All-State Welding Alloys Co., Inc., 249-35 Ferris Ave., White Plains, N. Y.
 Alpha Metals, Inc., 36 Water St., Jersey City, N. J.
 Alpha Tool & Supply Co., P.O. Box 119, Westwood, N. J.
 Alphil Spot Welding Co., 1058 Pacific St., Brooklyn 1, N. Y.
 Alsynite Co. of America, 4654 De Soto St., San Diego 9, Calif.
 Alton Mfg. Co., 1112 Ross Av., Dallas 2, Texas.
 Alumatic Corp. of America, 2081 S. 36th St., Milwaukee 14, Wis.
 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa.
 Aluminum Enterprises, Inc., P. O. Box 5004, Detroit 36, Mich.
 Aluminum Goods Mfg. Co., Manitowoc, Wis.
 Amana Refrigeration, Inc., Amana, Ia.
 Amerform Corp., Real Estate Trust Building, Philadelphia 7, Pa.
 American Actuator Corp., 219 E. 44th St., New York 17, N. Y.
 American Agile Corp., P. O. Box 168, Bedford, Ohio
 American Air Filter Co., Inc., 355 Central Av., Louisville 8, Ky.
 American Blower Corp., Detroit 32, Mich.
 American Brass Co., 414 Meadow St., Waterbury 20, Conn.
 American Cabinet Hardware Corp., Rockford, Ill.
 American Chemical Paint Co., Brookside Av., Ambler, Pa.
 American Coils Co., 360 Thomas St., Newark 5, N. J.
 American Control Co., 405 E. Pine Ave., Compton, Calif.
 American Coolair Corp., 3604 Mayflower St., P. O. Box 2300, Jacksonville 3, Fla.
 American Cooling Tower Co., 2710 McGee St., Kansas City, Mo.
 American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N. Y.
 American Diffuser Co., 969 E. 140 St., Cleveland 10, O.
 American District Telegraph Co., 155 Sixth Ave., New York, N. Y.
 American Electrical Heater Co., 6110 Cass, Detroit, Mich.
 American Engineering Co., 2446 Aramingo Av., Philadelphia 25, Pa.
 American Flange & Mfg. Co., Inc., 30 Rockefeller Plaza, New York 20, N. Y.
 American Foundry & Furnace Co., 10th & Washington Sts., Bloomington, Ill.
 American Furnace Co., 1300 Hampton Av., St. Louis 10, Mo.
 American Hair & Felt Co., 222 N. Bank Dr., Chicago 54, Ill.
 American Hard Rubber Co., 11 Mercer St., New York 13, N. Y.
 American Ideal-Aire Corp., P. O. Box 177, Garden City, N. Y.
 American Instrument Co., Inc., 8010 Georgia Av., Silver Spring, Md.
 American Insulator Corp., New Freedom, Pa.
 American-Marietta Co., 101 E. Ontario St., Chicago 11, Ill.
 American Metal Hose Division, American Brass Co., 698 S. Main St., Waterbury 20, Conn.
 American Metal Products, 2911 Compton Ave., Los Angeles 11, Calif.
 American Metal Works, Inc., 321 N. Alexander, New Orleans, La.
 American Mohawk Co., Inc., 380 Hudson St., New York 14, N. Y.
 American MonoRail Co., 13133 Athens Ave., Cleveland 7, Ohio.
 American Nickeloid Co., 1505 Second St., Peru, Ill.
 American Panel, Inc., 9 W. Park Way, Pittsburgh 12, Pa.
 American Products Corp., 422 S. Dearborn St., Chicago 5, Ill.
 American Pulley Co., 4200 Wissahickon Av., Philadelphia 29, Pa.
 American Pullmax Co., Inc., 2455 N. Sheffield, Chicago, Ill.
 American Radiator & Standard Sanitary Corp., Air Conditioning Div., 40 W. 40th St., New York 18, N. Y.
 American Screw Co., Willimantic, Conn.
 American Silver Co., Inc., 36-07 Prince St., Flushing, N. Y.
 American Sisalkraft Corp., Attleboro, Mass.
 American Solder & Flux Co., 19th & Willard Sts., Philadelphia 40, Pa.
 American Steel Band Co., P. O. Box 565, Pittsburgh 30, Pa.
 American Steel & Wire Div., U. S. Steel Corp., Rockefeller Bldg., Cleveland, Ohio.
 American Warming & Ventilating Co., 1017 Summit St., Toledo 4, Ohio.
 American Welding & Mfg. Co., Building Products Div., Warren, O.
 Ammerman Co., C. L., 110 N. 2nd St., Minneapolis 1, Minn.
 Ampion Corp., 4-88 Forty-Seventh Av., Long Island City 1, N. Y.
 Ampower Products Co., 5737 W. 87th St., Oak Lawn, Ill.
 Anchor Div. Stratton & Terstege Co., Inc., P. O. Box 311, New Albany, Ind.
 Anchor Metal Co., Inc., 244 Boerum St., Brooklyn 6, N. Y.
 Anderson Brass Co., 5303-12th St., Detroit 8, Mich.
 Anderson Metals Corp., Overland Park, Kans.
 Anemostat Corp. of America, 10 E. 39th St., New York 16, N. Y.
 Angier Corp., Framingham, Mass.
 Annis Air Filter Div., Royal Heaters, Inc., 1024 Westminster Ave., Alhambra, Calif.
 Ansul Chemical Co., Refrigeration Div., Marinette, Wis.
 Anthony Co., Streator, Ill.
 Anti-Friction Bearings Co., 2020 S. Figueroa St., Los Angeles 7, Calif.
 Apollo Metal Works, 66th Pl. & S. Oak Park Av., Clearing Sta., Chicago 38, Ill.
 Appleton Supply Co., Inc., P. O. Box 319, Appleton, Wis.
 Appliances Co., 2032 N. Western, Chicago, Ill.
 Applied Mechanics Co., 381 Congress St., Boston 10 Mass.
 Aqua-Air Corp., 1040 Hempstead Tpke., Elmont, L. I., N. Y.
 Aqua-Therm, Inc., 39 N. Torrence St., Dayton, O.
 Aquatrol Laboratories, Inc., Clifton, N. J.
 Arco Co., The, 7301 Bessemer Ave., Cleveland 27, O.
 Arcos Corp., 1500 S. 50th St., Philadelphia 43, Pa.
 Arex Co., 612 N. Michigan Ave., Chicago 11, Ill.
 Arizona Maintenance Co., 1920 Miracle Mile, Tucson, Ariz.
 Arlington Electric Co., 5330 Easton Av., St. Louis 12, Mo.
 Armco Steel Corp., 703 Curtis St., Middletown, Ohio.
 Armor Electric Co., 1020 Holland St., Erie, Pa.
 Armstrong Co., 1001 E. 103rd St., Chicago 28, Ill.
 Armstrong Cork Co., 4404 Concord St., Lancaster, Pa.
 Armstrong Fittings Co., P. O. Box 1356, Des Moines, Iowa
 Armstrong Furnace Co., 851 W. Third Ave., Columbus 8, O.
 Arro Expansion Bolt Co., N. Boone Ave., Marion, O.
 Arrow Foundry Co., East Albion St., Freeport, Ill.
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford 6, Conn.
 Art Valve Co., 4662 N. Lincoln Ave., Chicago 25, Ill.
 Asbestos Asphalt Insulation, Inc., 2100 W. Fullerton Ave., Chicago 47, Ill.
 Ashburn Supply Co., 8648 Warner Dr., Culver City, Calif.
 Aston Products, Inc., 22804 Dequindre St., Hazel Park, Mich.
 Atcheson Glass Co., T. J., 920 Main St., Buffalo 2, N. Y.
 Atchison Specialty Mfg. Co., 1620 Pacific Av., Atchison, Kans.
 Atkins Saw Div., Borg-Warner Corp., 402 S. Illinois St., Indianapolis 9, Ind.
 Atkomatic Valve Co., 545 W. Abbott St., Indianapolis, Ind.
 Atlas Mfg. Co., Eustis and Robbins, St. Paul 14, Minn.
 Atlas Mineral Products Co., Mertztown, Pa.
 Atlas Powder Co., North Chicago, Ill.
 Atlas Valve Co., 282 South St., Newark 5, N. J.
 Atmos Corp., 1215 W. Fullerton Ave., Chicago 14, Ill.
 Auburn Burner Co., Lock Box 269, Auburn, Ind.
 Auburn Foundry, Inc., Stoker Div., Lock Box 471, Auburn, Ind.
 Auburn Spark Plug Co., Inc., Auburn, N. Y.
 Auer Register Co., 6600 Clement Ave., Cleveland 5, Ohio.
 Au-Temp-Co Corp., 657 Broadway, New York 12, N. Y.
 Auto-Flo Corp., 14590 Schaefer, Detroit 27, Mich.
 Autogas Co., 25th & Congress, Bellwood, Ill.
 Automatic Burner Corp., 1825 Carroll Av., Chicago 12, Ill.
 Automatic Control Co., 995 University Ave., St. Paul 4 Minn.
 Automatic Devices Co., Inc., Weather Controls Div., 714 Hillgrove Av., Western Springs, Ill.
 Automatic Firing Corp., 4417 Oleatha Ave., St. Louis 16, Mo.
 Automatic Gas Equipment Co., 301 Brushton Av., Pittsburgh 21, Pa.
 Automatic Humidifier Co., 19th & Main Sts., Cedar Falls, Iowa.
 Automatic Switch Co., 391 Lakeside Ave., Orange, N. J.
 Automatic Temperature Control Co., Inc., 5212 Pulaski Av., Philadelphia 44, Pa.
 Autorad, Inc., 3535 Fillmore St., Chicago 24, Ill.
 Auto-Therm Mfg. Co., 6400 E. Seven Mile, Detroit 34, Mich.
 Avco Mfg. Corp., Crosley and Bendix Home Appliances, 1329 Arlington, Cincinnati 25, O.
 Ayres, Inc., 1017 Rosene St., Houston 1, Tex.

B

Babbins, Inc., 89 Baxter St., New York 13, N. Y.
 Babbitt Chemical Specialties Co., 36 Prospect St., New Bedford, Mass.
 Babcock & Wilcox Co., Refractories Div., 161 E. 42nd St., New York 17, N. Y.
 Bacharach Industrial Instrument Co., 7301 Penn Ave., Pittsburgh 8, Pa.
 Bailey Co., Chas. M., 667 Folsom St., San Francisco 7, Calif.
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio.
 Baker Furnace & Cleaner Mfg. Co., 2810 Midwood Av., Toledo 6, Ohio.
 Bal-Air, Inc., 1210 McGavock St., Nashville, Tenn.

Baldor Electric Co., 4358 Duncan Av., St. Louis 10, Mo.
 Baldwin-Hill Co., 397 Breunig Ave., Trenton 2, N. J.
 Baldwin-Ward Mfg. Co., Ottawa, Kans.
 Ballastran Corp., 1701 N. Calhoun St., Ft. Wayne 7, Ind.
 Balloffet Nozzle Co., Inc., 6825 Adams St., Guttenberg, N. J.
 Baltimore Aircoil Co., Inc., 2615-2635 Mathews St., Baltimore 18, Md.
 Baltimore Porcelain Steel Corp., P. O. Box 928 AA, Baltimore 3, Md.
 Banner Burner Co., 227-E Indianola Ave., Youngstown 7, Ohio.
 Banner Products Co., 6804 N. 43rd St., Milwaukee 9, Wis.
 Barber-Colman Co., 1101 Rock St., Rockford, Ill.
 Barber Mfg. Co., 1052 E. 134th St., Cleveland 10, O.
 Bar-Brook Mfg. Co., Inc., 6135 Linwood Av., Shreveport, La.
 Barrafer Mfg. Co., Salina, Kans.
 Barclay, Inc., Robert, 1234 W. Fulton St., Chicago, Ill.
 Bard Mfg. Co., Evansport Road, Bryan, Ohio.
 Barkow Mfg. Co., Inc., Aug. G., 2230 S. 43rd St., Milwaukee 15, Wis.
 Barksdale Valves, 5125 Alcoa Ave., Los Angeles 58, Calif.
 Barnard Co., Geo. A., 74 Prescott St., Worcester, Mass.
 Barnebey-Cheney Co., Pur Air Div., Cassady at 8th Ave., Columbus 19, O.
 Barnes Metal Products Co., 4425 W. 16th St., Chicago 23, Ill.
 Barnhardt Mfg. Co., P. O. Box 2176, Charlotte 1, N. C.
 Barreled Sunlight Paint Co., 35 Dudley St., Providence 1, R. I.
 Barrett Div., Allied Chemical & Dye Corp., 40 Rector St., New York 6, N. Y.
 Barry Blower Co., 3100 California St., N. E., Minneapolis, Minn.
 Barry Corp., 1000 Pleasant St., Watertown, Mass.
 Barth Engineering & Mfg. Co., Milldale, Conn.
 Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit 2, Mich.
 Barwick Mfg. Corp., 317 E. 18th, Wichita 5, Kans.
 Bastian-Blessing Co., 4201 W. Petersen Av., Chicago 30, Ill.
 Bastian Mfg. Co., W. B., 2117 Violet St., Los Angeles 21, Calif.
 Bastian-Morley Co., Inc., 208 Truesdale Ave., La Porte, Ind.
 Bateman Foundry & Machine Co., Mineral Wells, Tex.
 Bath Co., Cyril, 32272 Aurora Rd., Solon, O.
 Bayley Blower Co., 1817 S. 66th St., Milwaukee 14, Wis.
 Beacon-Morris Corp., 60 Brainerd Rd., Allston, Boston 34, Mass.
 Bead Chain Mfg. Co., 105 Mountain Grove St., Bridgeport 5, Conn.
 Bearlee Products Co., 1255 S. Monroe Ave., Green Bay, Wis.
 Bear Mfg. Co., Industrial Div., 2030 Fifth Av., Rock Island, Ill.
 Beck Engineering Combustion Kompany, 2100 Cole St., St. Louis 6, Mo.
 Beckett & Co., Thomas, 2521 Willowbrook Rd., P. O. 7354, Dallas 9, Texas.
 Beckett Corp., R. W., 38250 Cleveland Rd., (Route U. S. 20), Elyria, Ohio.
 Beckley Perforating Co., 305 North Av., Garwood, N. J.
 Belco Industries, Inc., 3830 Olive St., St. Louis 8, Mo.
 Belden Machine Co., 1108 Whalley Av., New Haven 15, Conn.
 Bell Engineering & Supply Co., Three Rivers, Mich.
 Belmetals Mfg., Co., Inc., 1300 Old County Rd., Belmont, Calif.
 Belmont Smelting & Refining Works, Inc., 330 Belmont Av., Brooklyn 7, N. Y.
 Benchmark Mfg. Co., 1835 W. Rosecrans, Gardena, Calif.
 Benjamin Air Rifle Co., 1527 S. 8th St., St. Louis 4, Mo.
 Benner-Nawman, Inc., 3421 Hollis, Oakland, Calif.
 Bennett-Ireland, Inc., 11 Exchange St., Norwich, N. Y.
 Benson Co., Inc., Alex R. 1040 S. Bay Rd., Hudson, N. Y.
 Berger Bros. Co., 229-237 Arch St., Philadelphia 6, Pa.
 Berger Furnace Corp., 4th & Main St., Belle Vernon, Pa.
 Berger Mfg. Div. of Republic Steel Corp., 1038 Bleden Ave., N. E. Canton 3, Ohio.
 Bergman Tool Mfg. Co., Inc., 1573 Niagara, Buffalo, N. Y.
 Berko Electric Mfg. Corp., 212-40 Jamaica Ave., Queens Village 28, N. Y.
 Berkroy Products Co., 2516 N. Ontario St., Burbank, Calif.
 Bern's Mfg. Co., 3050 N. Rockwell, Chicago 18, Ill.
 Bernz Co., Otto, 280 Lyell Ave., Rochester 6, N. Y.
 Bridgese Shear Co., Jefferson & St. Joseph Sts., Sturgis, Mich.
 Bertram Co., Harvey P., 1008 W. 9th St., Cincinnati, Ohio.
 Bertram Mfg. Co., 230 E. Ohio St., Chicago, Ill.
 Bertsch & Co., Church St., Cambridge City, Ind.
 Besser Metal Products Corp., 754 Clement Ave., Charlotte, N. C.
 Bethlehem Foundry & Machine Co., 225 W. Second St., Bethlehem, Pa.
 Bethlehem Steel Co., 701 E. Third St., Bethlehem, Pa.
 Bettcher Mfg. Corp., Herbst Furnace Div., 3106 W. 61st St., Cleveland, O.
 Bettcher Plastics Co., 1951 N. W. Wilson St., Portland, Ore.
 Bett-Marr Mfg. Co., Hopkins, Minn.
 Betz Corp., 445 State St., Hammond, Ind.
 Beverly Shear Mfg. Co., The, 3020 W. 11th St., Chicago 43, Ill.
 Bica Co., 903 N. State St., Girard, Ohio.
 Bieler & Sons, Inc., L., 35-42 41st St., Long Island City, N. Y.
 Biersach & Niedermeyer Co., 1937 N. Hubbard St., Milwaukee 12, Wis.
 Big Joe Mfg. Co., 900 W. Jackson Blvd., Chicago 7, Ill.
 Biglin Co., Inc., H. C., 177 Harris, Atlanta, Ga.
 Billmyre Blower Div., Lamson Corp., Syracuse, N. Y.
 Binks Mfg. Co., 3114 Carroll Av., Chicago 12, Ill.
 Birchwood Chemical Co., 4500 W. 44th St., Minneapolis, Minn.
 Bird & Son, Inc., East Walpole, Mass.
 Birks Mfg. Co., 809 Hanover Rd., Meriden, Conn.
 Bishop & Babcock Mfg. Co., 4901 Hamilton Av., Cleveland 14, Ohio.
 Bishop Co., R. H., 14 E. Washington St., Champaign, Ill.
 Black & Decker Mfg. Co., 682 Pennsylvania Ave., Towson 4, Md.
 Black Mfg. Co., 201 Second St., Harrison, N. J.
 Black, Sivalis & Bryson, Inc., 7500 E. 12th St., Kansas City 26, Mo.
 Blissfield Mfg. Co., Blissfield, Mich.
 Blue-Ray Gas Burner Co., 1305 E. Vernor Highway, Detroit 7, Mich.
 Blue Ridge Glass Corp., Kingsport, Tenn.
 Blue Ridge Talc Co., Inc., Henry, Va.
 Bock Corp., 110 S. Dickinson St., Madison 3, Wis.
 Bodine Electric Co., 2254 W. Ohio St., Chicago 12, Ill.
 Bohn Aluminum & Brass Corp., 1400 Lafayette Bldg., Detroit, Mich.
 Bonair Products, Inc., 517 Ellis St., Darby, Pa.
 Bossert Div., Rockwell Spring and Axle Co., Utica 1, N. Y.
 Bostitch, 1007 Mechanic St., Westerly, R. I.
 Boston Machine Works Co., 7 Willow St., Lynn, Mass.
 Bothfeld Retractor Co., Swanson & Clymer Sts., Philadelphia 47, Pa.
 Bovee Furnace Works, 827 Commercial, Waterloo, Iowa.
 Bowen Water Heater Div., Handling Equipment Mfg. Corp., Wixom, Mich.
 Bowtby Air Devices Co., 300 W. Indianapolis, Wichita, Kans.
 Bowman Co., Inc., D. F., 315-317 W. Main St., New Albany, Ind.
 Bowser, Inc., Incineration Div., Cairo, Ill.
 Boyertown Auto Body Works, Inc., Boyertown, Pa.
 Braden Mfg. Co., Inc., 431 N. 14th St., Terre Haute, Ind.
 Brandes Co., 2046 Winnebago St., Madison 4, Wis.
 Brasco Mfg. Co., 152nd & Commercial Av., Harvey, Ill.
 Brass & Copper Import, Inc., 220 Broadway, New York 38, N. Y.
 Brauer Supply Co., A. G., 2100 Washington Ave., St. Louis 3, Mo.
 Breese Burners, Inc., P. O. Box 4158, Coronado Station, Santa Fe, N. Mex.
 Breeze Corps., Inc., 43 S. 6th St., Newark 7, N. J.
 Breidert, Co., G. C., P. O. Box 1190, San Fernando, Calif.
 Bremil Mfg. Co., 1020 Holland St., Erie, Pa.
 Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40, Ill.
 Bridgeport Brass Co., 30 Grand St., Bridgeport 2, Conn.
 Bristol Co., P.O. Box 1790, Waterbury 20, Conn.
 Broan Mfg. Co., Inc., 1669 N. Water St., Milwaukee 2, Wis.
 Brookside Products Co., Inc., McCordsville, Ind.
 Brown-Brockmeyer Co., Inc., 1000 S. Smithville Rd., Dayton 1, Ohio.
 Brown Fintube Co., The, Elyria, Ohio.
 Brown, Gene, 316 Senisa Dr., San Antonio, Tex.
 Browning Mfg. Co., Inc., Central Ave., Main & Chester Sts., Maysville, Ky.
 Brown Products Corp., 97-12 Metropolitan Ave., Forest Hills, N. Y.
 Brucker, Inc., M., 820 N. Wolcott Ave., Chicago, Ill.
 Brulin Co., 2939 Columbia Ave., Indianapolis, Ind.
 Brumme Mfg. Co., 1240 E. Empire St., R. R. 1, Bloomington, Ill.
 Brundage Co., 500 N. Park St., Kalamazoo 11, Mich.
 Brunner Mfg. Co., 1821 Broad St., Utica 1, N. Y.
 Bryan Steam Corp., P. O. Box 337, Peru, Ind.
 Bryant Div. of Carrier Corp., 48 Monument Circle, Indianapolis, Ind.
 Buchanan Electric Products Corp., 226 Route 22, Hillside, N. J.
 Buckeye Furnace Pipe Co., Columbus 8, Ohio.
 Buckeye Water Heater Co., 6901 Quincy Ave., Cleveland 4, Ohio.
 Buensod-Stacey, Inc., 60 E. 42nd St., New York 17, N. Y.
 Buffalo Forge Co., 497 Broadway, Buffalo, N. Y.
 Bundy Tubing Co., 8109 E. Jefferson Ave., Detroit 14, Mich.
 Burden Co., Alan E., 1940-50 Pontius, Los Angeles 25, Calif.
 Burdett Mfg. Co., 3433 W. Madison, Chicago, Ill.
 Burgess Thomas Co., P.O. Box 287, Bloomfield, N. J.

Burke Engineering Co., 1824 S. Burlington Ave., Los Angeles 6, Calif.
 Burnham Corp., Irvington, N. Y.
 Burnite Valve Mfg. Corp., 175 W. 1st St., Mt. Vernon, N. Y.
 Burns Machinery Co., F. W., 1730 W. North Av., Milwaukee 5, Wis.
 Burt Mfg. Co., 38 E. South St., Akron 11, Ohio.
 Bush Mfg. Co., 179 South St., West Hartford 10, Conn.
 By-Buk Co., 4314 W. Pico Blvd., Los Angeles 19, Calif.
 Byers Co., A. M., Clark Bldg., Pittsburgh 22, Pa.

C

C. & H. Air Conditioning Fan Co., Inc., 1603 DeKalb Ave., N. E. Atlanta 6, Ga.
 C W R Mfg. Co., P. O. Box 428, Morro Bay, Calif.
 Cabot, Inc., Samuel, 141 Milk St., Boston 9, Mass.
 Cady Co., Sub. General Fittings Co., 123 Georgia Av., Providence 5, R. I.
 Calbar Paint & Varnish Co., 2612 N. Martha St., Philadelphia 25, Pa.
 Calcinator Corp., 28th & Water, Bay City, Mich.
 Calculator Specialties Co., 122 S. Michigan Ave., Chicago 3, Ill.
 Calorol Burner Corp., 850 Windsor St., Hartford 3, Conn.
 Cambridge Filter Corp., 738 Erie Blvd., E., Syracuse 3, N. Y.
 Camloc Fastener Corp., 22 Spring Valley Rd., Paramus, N. J.
 Campbell Co., E. K., 1809 Manchester Ave., Kansas City 26, Mo.
 Campbell Heating Co., 3121 Dean Av., Des Moines 17, Iowa.
 Campbell Machine Div., American Chain & Cable Co., Inc., 929 Connecticut Ave., Bridgeport 2, Conn.
 Campbell Stainless Products Co., Washington, Pa.
 Campro Div., Chicago Molded Products Corp., 2717 N. Normandy Ave., Chicago 35, Ill.
 Cam-StaT Inc., Div. Paul Henry Co., 11833 W. Olympic Blvd., Los Angeles 64, Calif.
 Cannelton Sewer Pipe Co., Radiantile Div., Fourth & Washington Sts., Cannelton, Ind.
 Canton Stoker Corp., 307 Andrews Pl., S. W., Canton 1, Ohio.
 Carajon Chemical Co., Inc., 428 W. Main St., Fremont, Mich.
 Carbide & Carbon Chemicals Co., Div. Union Carbide & Carbon Corp., 30 E. 42nd St., New York 17, N. Y.
 Carboline Co., 331 Thornton Ave., St. Louis 19, Mo.
 Carey Electronic Engineering Co., Metal Wool Div., 1880 Clifton Ave., Springfield, O.
 Carey Mfg. Co., Philip, Cincinnati 15, Ohio.
 Cargocaire Engineering Corp., 15 Park Row, New York 38, N. Y.
 Carlin Co., The, 912 Silas Deane Highway, Wethersfield, Conn.
 Carlson Products, 10225 Meech, Cleveland, Ohio.
 Carlson Co., Inc., A. B., 349 Woodlawn Ave., Aurora, Ill.
 Carnes Corp., S. Main St., Verona, Wis.
 Carolina Aniline & Extract Co., Inc., P. O. 2386, Charlotte, N. C.
 Carolina Blower Co., Inc., 430 Morehead Ave., Greensboro, N. C.
 Carpenter Heating & Stoker Co., 2135 St. Clair Ave., Cleveland 14, Ohio.
 Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y.
 Carter Paint Co., 310 N. Main St., Liberty, Ind.
 Cartier & Sons Co., M. N., 275 Canal St., Providence 3, R. I.
 Cartwright & Son, J., Malaga, Calif.
 Cary Mfg. Co., Waupaca, Wis.
 Cash Co., A. W., P. O. Box 551, Decatur, Ill.
 Cauhorn Distributing Co., 20722 W. Seven Mile, Detroit 19, Mich.
 Ceco Steel Products Corp., 5601 W. 26th St., Chicago, Ill.
 Celco Corp., 110 E. 42nd St., New York 17, N. Y.
 Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill.
 Cemenstone Corp., Neville Island, Pittsburgh 25, Pa.
 Central Furnace & Stove Repair Co., 3937 Olive St., St. Louis 8, Mo.
 Central States Mfg. Co., Inc., 1200 S. Summit, Arkansas City, Kans.
 Central Steel & Wire Co., 3000 W. 51st St., Chicago, Ill.
 Central West Machinery Co., 335 S. Western, Chicago, Ill.
 Century Electric Co., 1806 Pine St., St. Louis 3, Mo.
 Century Engineering Corp., 401 Third St., S. E., Cedar Rapids, Iowa.
 Century Fan & Ventilator Co., Inc., 43 Cedar St., Stamford, Conn.
 Certain-teed Products Corp., 120 E. Lancaster Ave., Ardmore, Pa.
 Certified Furnace Corp., P. O. Box 1059, Trenton 8, N. J.
 Chain Belt Co., 4618 W. Greenfield Ave., Milwaukee 1, Wis.
 Chalmers Oil Burner Co., 312 Lumber Exchange Bldg., Minneapolis 1, Minn.
 Chamberlin Co. of America, 1254 Labrosse, Detroit 32, Mich.
 Champion Blower & Forge Co., Harrisburg Av., & Charlotte St., Lancaster, Pa.
 Champion Bronze Powder & Paint Co., 2101 N. Elston Ave., Chicago, Ill.

Champion Furnace Pipe Co., 211-215 Eaton St., Peoria 3, Ill.
 Char-Gale Mfg. Co., R. 2, Anoka, Minn.
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.
 Chase Mfg. Co., 3008 W. Jefferson Blvd., Los Angeles 6, Calif.
 Chase Products, Inc., 20th St. & Gardner Rd., Broadview, Ill.
 Chattanooga Royal Co., First and Delmar Sts., Chattanooga 6, Tenn.
 Cheesman-Elliott Co., Inc., 639 Kent Av., Brooklyn 11, N. Y.
 Chelsea Fan & Blower Co., Inc., 639 South Ave., Plainfield, N. J.
 Chemical Coatings & Engineering Co., Westchester Pike, Edgemont, Pa.
 Chemical Solvent Co., 3005 N. 16th St., Birmingham, Ala.
 Chemold Co., 2000 Colorado Blvd., Santa Monica, Calif.
 Cheney Flashing Co., 623 Prospect St., Trenton 5, N. J.
 Chester Hoist Div., National Screw & Mfg. Co., Lisbon, O.
 Chevrolet Motor Div., General Motors Corp., Detroit 2, Mich.
 Chicago Belting Div., Chicago-Allis Mfg. Corp., 113 N. Green St., Chicago 7, Ill.
 Chicago Blower Corp., 9867 Pacific Ave., Franklin Park, Ill.
 Chicago Die Casting Mfg. Co., 2510-14 W. Monroe St., Chicago 12, Ill.
 Chicago Expansion Bolt Co., 1338 W. Concord Pl., Chicago 22, Ill.
 Chicago Metal Mfg. Co., 3724 S. Rockwell St., Chicago 32, Ill.
 Chicago Perforating Co., 2445 W. 24th Pl., Chicago 8, Ill.
 Chicago Pneumatic Tool Co., 6 E. 44th St., New York 17, N. Y.
 Chicago Rawhide Mfg. Co., 1301 Elston Av., Chicago 22, Ill.
 Chicago Rivet & Machine Co., 9600 W. Jackson Blvd., Bellwood, Ill.
 Chicago Smelting & Refining Corp., 3701 S. Kedzie Ave., Chicago 32, Ill.
 Chicago Steel Furnace Co., 9326 S. Anthony Ave., Chicago 17, Ill.
 Chicago Tramrail Co., 1330 S. Kostner Ave., Chicago 30, Ill.
 Chicopee Mills, Inc., 47 Worth St., New York 13, N. Y.
 Chimney Sales Corp., 1317 F St., N. W., Washington 4, D. C.
 Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., Fremont Av., Tonawanda, N. Y.
 Cincinnati Elbow Co., 4730 Madison Rd., Cincinnati 27, O.
 Cincinnati Shaper Co., Hopple, Garrard & Elam, Cincinnati 25, Ohio.
 Cincinnati Stamping & Furnace Co., 28 W. McMicken Ave., Cincinnati 10, Ohio.
 Circle Flow Condenser Co., P. O. Box 472, Stillwater, Okla.
 Cirklair Products Div., Folsom Co., Inc., 3104 Oak Lane, Dallas 26 Texas.
 City Chemical Corp., 132 W. 22nd St., New York 11, N. Y.
 Clamage Fan Co., North & Porter Sts., Kalamazoo 16, Mich.
 Clark Bros. Bolt Co., Milldale, Conn.
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio.
 Clark Co., Robert H., 9330 Santa Monica Blvd., Beverly Hills, Calif.
 Clauss Cutlery Co., Fremont, O.
 Clay Equipment Corp., Cedar Falls, Iowa.
 Clayton & Lambert Mfg. Co., Louisville Div., 1707 Dixie Hwy., Louisville 10, Ky., and Middletown, Ohio.
 Clemson Bros., Inc., Middletown, N. Y.
 Cleveland Crane & Engineering Co., 5866 E. 283rd St., Wickliffe, Ohio.
 Cleveland Heater Co., 2310 Superior Av., N. E., Cleveland 14, Ohio.
 Cleveland Humidifier Co., 7802 Wade Park Av., Cleveland 3, Ohio.
 Cleveland Punch & Shear Works Co., E. 40th & St. Clair Av., Cleveland 14, Ohio.
 Cleveland Register & Grille Mfg. Co., 3188 E. 80th, Cleveland, O.
 Clime-Matic Corp., Connecticut & Richards Ave., South Norwalk, Conn.
 Clinton Metallic Paint Co., Clinton, N. Y.
 Coal-O-Matic Co., Trucksville (Luzerne County), Pa.
 Cobell Industries, Inc., Meacham Field, Fort Worth 1, Tex.
 Cobra Metal Hose Div., DK Mfg. Co., 4640 W. 54th St., Chicago, Ill.
 Cole Hot Blast Mfg. Co., 3817 S. Racine Av., Chicago 9, Ill.
 Coleman Co., Inc., St. Francis & Second St., Wichita 1, Kans.
 Cole-Sewell Engineering Co., 2288 University Av., St. Paul 4, Minn.
 Colonial Alloys Co., Ridge Ave., & Crawford, Philadelphia, Pa.
 Colonial Plastics Mfg. Co., Subsidiary Van Dorn Iron Works Co., 2685 E. 79th St., Cleveland, O.
 Columbia Burner Co., 729 Ewing St., Toledo 7, Ohio.
 Columbia Specialty Co., Inc., 4925 Bradley Blvd., Chevy Chase 15, Md.
 Columbus Heating & Ventilating Co., 182 N. Yale Av., Columbus 16, Ohio.

Combustion Control Div., Electronics Corp. of America, 218 Beacon St., Boston 16, Mass.
 Combustion Engineering, Inc., 911 W. Main St., Chattanooga, Tenn.
 Combustion Equipment Co., Box 734 B, Silvia, Ill.
 Comfort Products Corp., 440 Hillburn Dr., P. O. Box 5531, Dallas 2, Texas.
 Commercialaire, Inc., 300 Pacific St., Brooklyn 1, N. Y.
 Commercial Filters Corp., 2 Main St., Melrose 76, Mass.
 Commercial Plastics Co., 2812 W. North Ave., Chicago 47, Ill.
 Commercial Shearing & Stamping Co., P. O. Box 719, Youngstown 1, Ohio.
 Commonwealth Brass Corp., 5781-5835 Commonwealth Av., Detroit 8, Mich.
 Commonwealth Co., 2127 W. Commonwealth Av., Alhambra, Calif.
 Compton Shear Co., W. H., 314 Camden St., Newark 3, N. J.
 Comstock-Castle Stove Co., 731 S. Front St., Quincy, Ill.
 Conco Engineering Works, Heating Division, Mendota, Ill.
 Condensation Engineering Corp., 3511 W. Potomac Ave., Chicago 51, Ill.
 Condenser Service & Engineering Co., Inc., 150 Observer Highway, Hoboken, N. J.
 Congress Drives, Div. Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich.
 Connecticut State Furnace Co., The, 340 Kossuth St., Bridgeport, Conn.
 Connor Engineering Corp., Shelter Rock Lane, Danbury, Conn.
 Continental Air Filters, Inc., P. O. Box 1647, Louisville 1, Ky.
 Continental Instrument Co., 1530 St. Clair Ave., Cleveland 14, Ohio.
 Continental Mfg. Co., 712 S. 23rd Ave., Phoenix, Ariz.
 Continental Products Co., 1150 E. 22nd St., Euclid 17, Ohio.
 Continental Screw Co., Mt. Pleasant St., New Bedford, Mass.
 Continental Water Heater Co., 1801 Pasadena Av., Los Angeles 31, Calif.
 Controlair Mfg. Co., 1932 S. Compton Av., Los Angeles 11, Calif.
 Coogan Co., Inc., Frank J., 6319 Broad St., Pittsburgh 6, Pa.
 Cook Co., Loren, 664 Front St., Berea, Ohio.
 Coolerator Co., New Garrick Bldg., Duluth, Minn.
 Cool-Ette, Inc., 20080 Jas. Couzens Highway, Detroit, Mich.
 Cooper Co., Clark, Palmyra, N. J.
 Cooper Stoker Co., 117 Fourth St., Pittsfield, Mass.
 Coopers Creek Chemical Corp., West Conshohocken, Pa.
 Copeland Refrigeration Corp., Sidney, Ohio.
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa.
 Coppus Engineering Corp., 344 Park Ave., Worcester 2, Mass.
 Corbin Div., P & F, American Hardware Corp., 102 Washington St., New Britain, Conn.
 Corbman Bros., Inc., 25th & York St., Philadelphia, Pa.
 Cordo Chemical Corp., 34 Smith St., Norwalk, Conn.
 Corlett-Turner Co., 1001 S. Kostner Ave., Chicago 24, Ill.
 Corrosite Corp., 64 S. 6 St., Brooklyn 11, N. Y.
 Cory Mfg. Co., 550 W. Otterman St., Greensburg, Pa.
 Coughlan Co., G. N., West Orange, N. J.
 Cox Mfg. Co., Ridgeville, Ind.
 Cramer Co., Inc., The R. W., Box 36, Centerbrook, Conn.
 Cramer Mfg. Co., 5110 Westfield Ave., N. W., Canton, Ohio.
 Crane Co., 836 S. Michigan Av., Chicago 5, Ill.
 Crescent Tool Co., 230 Harrison St., Jamestown, N. Y.
 Cribben and Sexton Co., 700 N. Sacramento, Chicago, Ill.
 Crise Controls Div. Acro Mfg. Co., 2040 E. Main St., Columbus 16, Ohio.
 Cristy Specialty Corp., Worcester, Mass.
 Crocker-Wheeler Div., Elliott Co., Ampere 1, N. J.
 Cromley's, Lewisburg, Pa.
 Cronstroms Inc., 4225 Hiawatha Ave., Minneapolis, Minn.
 Cross & Currier Mfg. Co., Inc., 173 Washington St., Claremont, N. H.
 Cross Engineering Co., 160-178 Dundaff St., Carbondale, Pa.
 Crown Controls Co., Inc., New Bremen, Ohio.
 Crown Engineering Corp., Locust St., Keyport, N. J.
 Crucible Steel Co. of America, Henry W. Oliver Bldg., P. O. Box 88, Pittsburgh 30, Pa.
 Cuno Engineering Corp., 76 S. Vine St., Meriden, Conn.
 Cuprometal Mfg. Corp., 44th Ave., & Junction Blvd., Corona, N. Y.
 Curtis Mfg. Co., Refrigeration Div., 1946 Kienlen Av., St. Louis 20, Mo.
 Custom Industries Mfg., Inc., 1406 Parkman Rd., Warren, O.
 Custom Mfg. Co., 4105 W. Fullerton Ave., Chicago 39, Ill.
 Cutler-Hammer, Inc., 430 N. 12th St., Milwaukee 1, Wis.
 Cuyahoga Spring Co., 10254 Berea Road, Cleveland 2, Ohio.

D

Daffin Mfg. Co., North Prince St., Lancaster, Pa.
 Dahlstrom Machine Works, 4227 W. Belmont Ave., Chicago 41, Ill.
 Dahlstrom Metallic Door Co., S. E. Cor. E. Second & Buffalo Sts., Jamestown, N. Y.
 Dalsin Metal Products, 3506 Bloomington Ave., Minneapolis 7, Minn.
 Dalzen Mfg. Co., 525 S. Riverside, St. Clair, Mich.
 Damascus Steel Products Corp., 2215 Kishwaukee St., Rockford, Ill.
 Damascus Tube Co., Greenville, Pa.
 Damp-Vent Co., Box 203, Bettendorf, Ia.
 Dana Fan & Blower Corp., 3501 Colerain Ave., Cincinnati 23, Ohio.
 Daniels Mfg. Co., Inc., Sam, Daniels Rd., Hardwick, Vt.
 Danzer Metal Works Co., Box 128, Hagerstown, Md.
 Davidson Enameled Products, Inc., 1100 E. Kibby, Lima, O.
 Davidson Hyduty Roof Fan Co., 213 California St., Newton 58, Mass.
 Davis Regulator Co., 2546 S. Washtenaw Av., Chicago 8, Ill.
 Davis & Son Machine Works, 8426 Compton Av., Los Angeles 1, Calif.
 Day Co., 810 Third Av., N. E., Minneapolis 13, Minn.
 Day & Night Div., Carrier Corp., 700 Royal Oaks Dr., Monrovia, Calif.
 Dayton Rogers Mfg. Co., 2830 13th Av., S. Minneapolis 7, Minn.
 Dayton Rubber Co., 2342 W. Riverview Av., Dayton 1, Ohio.
 Deansteel Products, 111 Merchants St., San Antonio 5, Tex.
 Dearborn Chemical Co., Merchandise Mart Plaza, Chicago 54, Ill.
 Dearborn Stove Co., 1700 W. Commerce St., Dallas 8, Texas.
 Dearborn Tape & Label Co., P. O. Box 4119 N. E. Station, Dearborn, Mich.
 Debevoise Co., 74 20th St., Brooklyn 32, N. Y.
 De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.
 Deepfreeze Appliance Div., Motor Products Corp., North Chicago, Ill.
 Deering Air Cond. Co., 1069 Celestial, Cincinnati, Ohio.
 Defender Instrument and Regulator Co., 815 Clark Av., St. Louis 2, Mo.
 Delavan Mfg. Co., Grand Ave. & Fourth St., West Des Moines, Ia.
 Delco Appliance Div., General Motors Corp., 391 Lyell Ave., Rochester 6, N. Y.
 Delco Products Div., General Motors Corp., 329 E. First St., Dayton, Ohio.
 Delta Heating Corp., 1 Cole St., Trenton 8, N. J.
 Delta Power Tool Div., Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8, Pa.
 DeLuxe Oil Burner Co., 2121 First Av., Seattle, Wash.
 Demuth & Sons, Inc., Charles, 245 Elm Pl. Mineola, L. I., N. Y.
 Denbo Engineering and Sales Co., Inc., 3301 Martindale Ave., Indianapolis 18, Ind.
 Deniston Co., 4856 S. Western Ave., Chicago 9, Ill.
 Denver Fire Clay Co., 2301 Blake St., Denver 17, Colo.
 Desmond-Stephan Mfg. Co., Urbana, O.
 Desomatic Products, Inc., 1109 W. Broad St., Falls Church, Va.
 DeSoto Oil Burner Corp., 538 S. Queen St., York, Pa.
 Detroit Air Conditioning Service Co., Nashville, Mich.
 Detroit Controls Corp., 5900 Trumbull Ave., Detroit 8, Mich.
 Detroit Float Co., Air Conditioning Products Div., 2340 W. Lafayette Blvd., Detroit 16, Mich.
 Detroit Hoist & Machine Co., 8202 Morrow St., Detroit 11, Mich.
 Detroit Moulding Div., L. A. Young Spring & Wire Corp., 9210 Russell St., Detroit 11, Mich.
 Detroit Safety Furnace Pipe Co., 5960 Second Blvd., Detroit 2, Mich.
 Detroit Stamping Co., 350 Midland Ave., Detroit 3, Mich.
 Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11, Mich.
 Detroit Stoker Co., General Motors Bldg., Detroit 2, Mich.
 Detroit Surfacing Machine Co., 1333 E. Eight Mile Rd., Detroit 20, Mich.
 Deutsch Co., 7000 Avalon Blvd., Los Angeles, Calif.
 Devine Mfg. Co., J. P., Div. of H. K. Porter Co., Inc., 1932 Oliver Bldg., Pittsburgh 22, Pa.
 Diamond Castings Co., Inc., Terra Cotta Rd., Johnsonburg, Pa.
 Diamond Machine Tool Co., 5111 Coffman-Pico Rd., Pico, Calif.
 Diamond Mfg. Co., 243 W. 8th St., Wyoming, Pa.
 Dicler Div., General Machine & Mfg. Co., Berwick, Pa.
 Dickson Co., 7420 Woodlawn Ave., Chicago 19, Ill.
 Dickson Weatherproof Nail Co., P. O. Box 590, Evanston, Ill.

Dieckmann Co., Ferdinand, 1180 Harrison Ave., Cincinnati 22, Ohio.
 Diehl Mfg. Co., 1117 Finner Ave., Somerville, N. J.
 Dielectric Products Co., Inc., 125 Virginia Ave., Jersey City 5, N. J.
 Diesel Oil Burner Corp., 105-20 New York Blvd., Jamaica, N. Y.
 Diesel Power, Inc., P. O. Box 72, Greenville, Pa.
 Disston & Sons, Inc., Henry, Unruh & Milnor Sts., Philadelphia 35, Pa.
 Division Lead Co., 7742 W. 61st Pl., Summit, Ill.
 DoALL Co., 254 Laurel Ave., Des Plaines, Ill.
 Dockson Corp., 3839 Wabash Av., Detroit 8, Mich.
 Dodge Div., Chrysler Corp., 21500 Mound Rd., Detroit 31, Mich.
 Dodge Mfg. Corp., 500 S. Union St., Mishawaka, Ind.
 Doelger & Kirsten, Inc., 3015 W. Chambers St., Milwaukee 10, Wis.
 Dollinger Corp., 11 Centre Park, Rochester 3, N. Y.
 Domestic Mfg. Co., 201 Westlake, N., Seattle 1, Wash.
 Donaldson Power Ventilator Co., 11847 Vose St., North Hollywood, Calif.
 Dongan Electric Mfg. Co., 2981 Franklin St., Detroit 7, Mich.
 Donley Bros. Co., 13932 Miles Ave., Cleveland, O.
 Dormeyer Industries, 3418 Milwaukee Ave., Chicago 41, Ill.
 Dornback Furnace & Foundry Co., 724 E. 103rd St., Cleveland 8, Ohio.
 Dot-N-Dasher, P. O. Box 668, Creskill, N. J.
 Dover Mfg. Co., Box 498, Independence, Mo.
 Dow Chemical Co., Midland, Mich.
 Dowagiac Steel Furnace Co., Beeson St., Dowagiac, Mich.
 Downing Steel Products Co., 4005 S. Smithville, Dayton 9, O.
 Downs-Smith Brass & Copper Co., Inc., 304-320 E. 45th St., New York 17, N. Y.
 Doyle & Roth Mfg. Co., Foot of 23rd St., Brooklyn 32, N. Y.
 Doyle Vacuum Cleaner Co., 227 Stevens St., S. W., Grand Rapids 2, Mich.
 Dravo Corp., Dravo Bldg., Fifth & Liberty Ave., Pittsburgh 22, Pa.
 Drayer-Hanson, Inc., Subsidiary of National-U. S. Radiator Corp., Box 2215, Terminal Annex, Los Angeles 34, Calif.
 Dreis & Krump Mfg. Co., 7404 Loomis Blvd., Chicago 36, Ill.
 Drico Industrial Corp., 100-8th St., Passaic, N. J.
 Dry & Sons, J. R., 1501 S. Treadaway, Abilene, Tex.
 Drying Systems, Inc., 1812½ W. Foster Ave., Chicago 40, Ill.
 Dryomatic Corp., 812 N. Fairfax St., Alexandria, Va.
 Dual-Air Fan Co., P. O. Box 208, Hampshire, Ill.
 Dualtron Co., 322 Perry Hwy., Pittsburgh 29, Pa.
 Ducane Heating Corp., Lincoln Park, N. J.
 Duc-Pac, Div. of Swett Bros., 78 Island Pond Rd., Springfield, Mass.
 Dunn-Rite Products, P. O. Box 297, Garden City, Mich.
 Duo-Therm Div., Motor Wheel Corp., Lansing 3, Mich.
 Du Pont de Nemours & Co., Inc., E. I., Wilmington 98, Del.
 Duro-Dyne Corp., 800 Third Ave., New Hyde Park, L.I., N.Y.
 Dust Suppression & Engineering Co., 154 Grove St., Lake Orion, Mich.
 Dwyer Mfg. Co., F. W., P. O. Box 373, Michigan City, Ind.

E

Eagle Chemical Co., Inc., 1501 W. Congress St., Chicago 7, Ill.
 Eagle-Picher Co., American Bldg., Central Pkwy. & Walnut, Cincinnati 1, Ohio.
 East Coast Co., 141 Milk St., Boston 9, Mass.
 Eastern Oil & Equipment Co., 27 Portland St., Portland 1, Maine
 Eastern Stainless Steel Corp., P. O. Box 1975, Baltimore 3, Md
 Easton Plastics Co., 900 Line St., Easton, Pa.
 Ebeco Mfg. Co., 265 N. Hamilton Rd., Columbus 13, O.
 Eckhart Mfg. Co., Inc., 931 Lehigh Av., P. O. Box 248, Union, N. J.
 Eclipse Air Brush Co., 390 Park Ave., Newark 7, N. J.
 Eclipse Fuel Engineering Co., 1017 Buchanan St., Rockford, Ill
 Econo-Matic Products Co., Inc., 11803 Grand River Ave., Detroit 4, Mich.
 Eddington Metal Specialty Co., P. O. Box K, Eddington, Pa.
 Eddy Stoker Corp., North Wolf Rd., Wheeling, Ill.
 Efeco Products Co., P. O. Box 154, Eastwood Sta., Syracuse 6, N. Y.
 Ehret Magnesia Mfg. Co., Valley Forge, Pa.
 Eisler Engineering Co., 760 S. 13th St., Newark 3, N. J.
 Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill
 Electrical Components Co., Div. of National Ceramic Co., 500 Southard St., Trenton 2, N. J.
 Electric Arc, Inc., 152 Jelliff Av., Newark 8, N. J.
 Electric Controller & Mfg. Co., 4528 Lee Rd., Cleveland 28, O.
 Electric Furnace-Man, Inc., 4th & Furnace Sts., Emmaus, Pa.

Electric Heating Products Co., 5800 S. Central Ave., Phoenix, Ariz.
 Electric Machinery Mfg. Co., 1137 Tyler St., N. E., Minneapolis 13, Minn.
 Electric Motor Corp., Div. Howard Industries, Inc., Racine, Wis.
 Electric Motors & Specialties, Inc., King and Hamsher Sts., Garrett, Ind.
 Electriglas Corp., Bergenfield, N. J.
 Electro-Air Cleaner Co., 1285 Reedsdale St., Pittsburgh, Pa.
 Electro Dustless Painting, Inc., 1052 New Britain Av., Elmwood 10, Conn.
 Electro Dynamic Div., General Dynamics Corp., 163 Avenue A, Bayonne, N. J.
 Electrol Burner Mfg. Co., Inc., 22 Union Av., Rutherford, N. J.
 Electro Mfg. Co., 7515 S. Main, Houston, Tex.
 Electromode Div. of Commercial Controls, 45 Crouch St., Rochester 3, N. Y.
 Electrovent Fan & Mfg. Co., 812 W. Lake St., Chicago 7, Ill.
 Electro-Watt Inc., Mercer & Aurora, Seattle 9, Wash.
 Elgen Mfg. Corp., 41-34-39th St., Long Island City 4, N. Y.
 Elgo Shutter & Mfg. Co., 2738 W. Warren Av., Detroit 8, Mich.
 Ellison Draft Gage Co., 548 W. Monroe St., Chicago 6, Ill.
 Elwell-Parker Elec. Co., 4131 St. Clair, Cleveland 3, Ohio.
 Emerson Electric Mfg. Co., 8100 Florissant Av., St. Louis 21, Mo.
 Empire Chemical Products Co., 10 Longworth St., Newark, N. J.
 Empire Door Co., Inc., 431 Southern Blvd., New York 35, N. Y.
 Empire Metal Co., 820 E. Water St., Syracuse, N. Y.
 Empire Stove Co., Belleville, Ill.
 Empire Ventilation Equipment Co., 35-129 Vernon Blvd., Long Island City 1, N. Y.
 Enderle, Inc., Ltd., Frank X., 1715 San Fernando Rd., Los Angeles 63, Calif.
 Engelhard, Inc., Chas., 850 Passaic Ave., East Newark, N. J.
 Engel Sheet Metal Equipment, Inc., 3001 N. Union, St. Louis 15, Mo.
 Engineering Industries Co., Ltd., 650 Dupont St., Toronto, Ont., Canada.
 Enico Products, 16573 Littenfield Av., Detroit, Mich.
 Equipment Engineering Co., 2853 Columbus Ave., Minneapolis, Minn.
 Erdle Perforating Co., 171 York St., Rochester 11, N. Y.
 Ergolyte Mfg. Co., 3627 N. Lawrence St., Philadelphia 40, Pa.
 Erickson Specialty Co., 10 Cayuga St., P. O. Box 141, Cohoes, N. Y.
 Erie Enameling Co., 1400 W. 20th St., Erie, Pa.
 Eriez Mfg. Co., 219 Magnet Dr., Erie, Pa.
 Esgelgroth & Co., 22 Edison Pl., Newark 2, N. J.
 Essick Mfg. Co., 1950 Santa Fe Av., Los Angeles 21, Calif.
 Eston Chemicals Div., American Potash & Chemical Corp., 3100 E. 26th St., Los Angeles, Calif.
 Etched Products Co., 3901 Queens Blvd., Long Island City 4, N. Y.
 Euclid Crane & Hoist Co., 1365 Chardon Rd., Euclid 17, Ohio
 Eutectic Welding Alloys Corp., 40-40 172nd St., Flushing 58, N. Y.
 Evans Corp., George, 121 37th St., Moline, Ill.
 EverHot Heater Co., 5189 Wesson Av., Detroit 10, Mich.
 Everhot Products Co., 2059 W. Carroll Av., Chicago 12, Ill.
 Everwarm, Inc., 2925 N. Central Ave., Knoxville, Tenn.
 Excelsior Steel Furnace Co., 118 S. Clinton St., Chicago 6, Ill.
 Excelsior Tool & Machine Co., 31st & Ridge Av., East St. Louis, Ill.
 Expert Welding Machine Co., 17144 Mt. Elliott St., Detroit, Mich.

F

F & E Mfg. Co., Box D, Centerville, Calif.
 Fabricated Products Co., West Newton, Pa.
 Fafnir Bearing Co., The, 37 Booth St., New Britain, Conn.
 Fageol Co., R. D., Heat Machine Div., Box 328, Kent, O.
 Fairbanks, Morse & Co., 600 S. Michigan Av., Chicago 5, Ill
 Fairmont Aluminum Co., P. O. Box 912, Fairmont, W. Va.
 Fairmount Tool & Forging Co., 10611 Quincy Av., Cleveland 6, Ohio.
 Fallington Mfg. Co., Fallington, Pa.
 Falstrom Co., 18 Falstrom Court, Passaic, N. J.
 Falz Mfg. Co., 1930 St. Anthony Ave., St. Paul, Minn.
 Famco Machine Co., 3100 Sheridan Rd., Kenosha, Wis.
 Famous Furnace Co., 6420 Woodland Ave., Cleveland 4, Ohio.
 Farquhar Furnace Co., 230 Owens Av., Wilmington, Ohio.
 Farr Co., Box 45187, Airport Sta., Los Angeles 45, Calif.
 Farrelloy Co., 1243 N. 26th St., Philadelphia 21, Pa.
 Fasco Industries, Inc., Box 509, Rochester 2, N. Y.
 Fedders-Quigan Corp., 57 Tonawanda St., Buffalo 7, N. Y.

Federal Machinery Co., 134 Grand St., New York 13, N. Y.
 Federated Metals Div., American Smelting and Refining Co.,
 120 Broadway, New York 5, N. Y.
 Fee & Mason Mfg. Co., Manasquan, N. J.
 Felter Co., John, Modern Metals Div., 1309 Ashland, Houston,
 Tex.
 Felters Co., Inc., 210 South St., Boston 11, Mass.
 Fenwal Inc., Ashland, Mass.
 Fenway Machine Sales Co., Inc., 263 W. 23rd St., Philadelphia
 3, Pa.
 Fern, Ralph, 1007 Fisk St., Scranton 9, Pa.
 Fidelity Tool Supply, Inc., 309 Vine St., Camden 2, N. J.
 Field Control Div., H. D. Conkey & Co., Drawer 11, Mendota,
 Ill.
 Fieser Co., F. J., 54 W. 21st St., New York 10, N. Y.
 Filter Glass Div., Process Development Co., Inc., Genoa, O.
 Filtrex Corp., 33-40 127th Pl., Corona, N. Y.
 Filt-R-Ite Co., 1408 W. Harrison St., Chicago 7, Ill.
 Finger, Joe, 7907 Madison Av., Cleveland 2, Ohio.
 Fingles Co., Reisterstown Rd. at Elgin Av., Baltimore 17, Md.
 Pipeline Stove & Furnace Lining Co., 1816 Kingsbury St., Chi-
 cago 14, Ill.
 Firestone Industrial Products Co., Firestone Park, Akron 17,
 Ohio.
 Firestone Plastics Co., Pottstown, Pa.
 Firewel Co., Inc., 3685 Broadway, Buffalo 25, N. Y.
 Fisher Brass Foundry, 5332 S. Santa Fe Ave., Los Angeles 11,
 Calif.
 Fisher Governor Co., 205 First Av., Marshalltown, Iowa.
 Flagler Corp., The, 19321 Filier Ave., Detroit, Mich.
 Flanders Mill Inc., Riverhead, L. I., N. Y.
 Flangeklamp Corp., 80 Leslie St., Buffalo 11, N. Y.
 Flemm Lead Co., Inc., Bradley Av. & School St., Long Island
 City 1, N. Y.
 Flex-Air, Inc., 4273 S. Broadway, Los Angeles 37, Calif.
 Flexaust Co., The, 100 Park Ave., New York 17, N. Y.
 Flexible Tubing Corp., Guilford, Conn.
 Flexonics Corp., 1315 S. Third Ave., Maywood, Ill.
 Flintkote Co., 30 Rockefeller Plaza, New York 20, N. Y.
 Flood Co., Hudson, Ohio.
 Floral City Heater Co., 402 S. Monroe St., Monroe, Mich.
 Floridin Co., Box 998, Tallahassee, Fla.
 Fluid Heat Div., Anchor Post Products, Inc., 6720 Eastern
 Av., Baltimore 24, Md.
 Fluor Corp., Ltd., The, 2500 S. Atlantic Blvd., Los Angeles 22,
 Calif.
 Fluxolder Products Co., 511 W. Larned, Detroit, Mich.
 Flynn & Emrich Co., 301 Holliday St., Baltimore 2, Md.
 Follansbee Steel Corp., Follansbee, W. Va.
 Folsom Snow Guard Co., 94 Hollis St., Holliston, Mass.
 Foote Foundry Co., J. B., N. Main St., Fredericktown, Ohio.
 Ford Chain Block Div., American Chain & Cable Co., Inc., York
 Pa.
 Ford Motor Co., Dearborn, Mich.
 Forest City Foundries Co., Niagara Furnace Div., 2500 W
 27th St., Cleveland 13, Ohio.
 Forston Co., 1400 Conti St., Houston 2, Tex.
 Foster Engineering Co., 835 Lehigh St., Union, N. J.
 Foxboro Co., 38 Neponset Ave., Foxboro, Mass.
 Fox Noiseless Hammer Co., 77 Green Hill Rd., Media, Pa.
 Fox Products Co., 4720 N. 18th St., Philadelphia 41, Pa.
 Fram Corp., Providence 16, R. I.
 Franck & Fric, 7109 Kinsman Rd., Cleveland 4, Ohio.
 Franklin Electric Co., Inc., E. Spring St., Bluffton, Ind.
 Fraser & Johnston Co., 1900 17th St., San Francisco 3, Calif.
 Frederick Iron & Steel, Inc., Frederick, Md.
 Freed Products Co., 1510 Third Ave., Moline, Ill.
 Fresh Air Circulator Co., 3108 Navigation, Houston 3, Texas
 Fresh'nd-Aire Co., Div. of Cory Corp., 221 N. LaSalle St.,
 Chicago 1, Ill.
 Frey & Co., Frank P., 2634 W. Madison St., Chicago 12, Ill.
 Frick Co., W. Main St., Waynesboro, Pa.
 Friedrich Refrigerators, Inc., 1117 E. Commerce, San Antonio,
 Tex.
 Friez Instrument Div., Bendix Aviation Corp., 1400 Taylor Av.,
 Baltimore 4, Md.
 Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton
 1, Ohio.
 Frigid, Inc., 128-168 Thirty-Second St., Brooklyn 52, N. Y.
 Fry Reglet Corp., P. O. Box 411, Bremerton, Wash.
 Fuelguard Co., 5643 Dyer St., Dallas 6, Texas.
 Fuel Reduction Corp., 220 N. Ada St., Chicago 7, Ill.
 Fulton Steelcraft Co., Swanton, O.
 Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Box 400
 Knoxville 1, Tenn.
 Furblo Co., Hermansville, Mich.
 Furnas Electric Co., Batavia, Ill.
 Fusion Engineering, 4504 Superior Ave., Cleveland 3, Ohio.

G

G & A Mfg. Co., P. O. Box 338, Addison, Ill.
 G. M. Mfg. Co., 50 W. Third St., New York 12, N. Y.
 GMC Truck & Coach Div., General Motors Corp., South
 Boulevard, Pontiac, Mich.
 G. & O. Mfg. Co., 138 Winchester Av., New Haven 8, Conn.
 G & S Mfg. Co., 2824 E. Washington, Phoenix, Ariz.
 Gallaher Co., 4106 Dodge St., Omaha, Nebr.
 Galvan Mfg. Co., Box 267, New Albany, Ind.
 Galvicon Corp., 40 W. 29th St., New York 1, N. Y.
 Garden City Fan Co., 332 S. Michigan Blvd., Chicago 4, Ill.
 Garland Mfg. Co., 48 Water St., Saco, Maine
 Garman Co., Inc., 1253 Grover, St. Louis 23, Mo.
 Gary Steel Products Corp., 4400 W. 9th St., Gary, Ind.
 Gasinator Mfg. Co., 2108 Payne Ave., Cleveland, O.
 Gas & Oil Industry Laboratories, Inc., 4 Paine Av., Irvington
 11, N. J.
 Gates & Co., Inc., George W., Hempstead Tpke & Lucille Ave.,
 Franklin Sq., L. I., N. Y.
 Gates Rubber Co., 999 S. Broadway, Denver 17, Colo.
 Gehri Co., 1117 Tacoma Ave., Tacoma 3, Wash.
 Geisel Mfg. Inc., 61 West Av., Elyria, Ohio.
 Gematic Burner Co., 16830 Miles Av., Cleveland 22, Ohio.
 Gem Clay Forming Co., Sebring, O.
 General Air Conditioning Corp., 4542 E. Dunham St., Los Angeles
 23, Calif.
 General Appliance Corp., Greenville, Mich.
 General Automatic Products Corp., 2300 Sinclair Lane, Balti-
 more, Md.
 General Blower Co., 8600 Ferris Av., Morton Grove, Ill.
 General Blower Co., Inc., 6137 Market St., Philadelphia 39, Pa.
 General Bronze Corp., Stewart Ave., Garden City, L. I., N. Y.
 General Chemical Div., Allied Chemical & Die Corp., 40 Rector
 St., New York 6, N. Y.
 General Controls Co., 801 Allen Av., Glendale 1, Calif.
 General Electric Co., Air Conditioning Div., 5 Lawrence St.,
 Bloomfield, N. J.
 General Electric Co., Apparatus Sales Div., 1 River Rd., Schenec-
 tady 5, N. Y.
 General Electric Co., Capacitor Dept., Hudson Falls, N. Y.
 General Electric Co., Carboly Dept., 11177 E. Eight Mile Rd.,
 Detroit 32, Mich.
 General Electric Co., Chemical and Metallurgical Div., 1 Plastics
 Ave., Pittsfield, Mass.
 General Electric Co., Lamp Div., Nela Park, Cleveland 12, Ohio.
 General Electric Co., Major Appliance Div., Room Air Conditioner
 Dept., 301 W. Liberty St., Louisville, Ky.
 General Engineering Co., Bay City, Mich.
 General Filters, Inc., 43800 Grand River Ave., Novi, Mich.
 General Fittings Co., 123 Georgia Ave., Providence 3, R. I.
 General Gas Light Co., 202 N. Park St., Kalamazoo 11F, Mich.
 General Oil Heating Corp., 322-6 55th St., West New York
 N. J.
 General Plate Div., Metals & Controls Corp., 34 Forest St.,
 Attleboro, Mass.
 General Products Co., Fredericksburg, Va.
 General Register Corp., 14 Factory St., Cedar Grove, N. J.
 General Scientific Equipment Co., 27th & Huntington Sts., Phila-
 delphia 32, Pa.
 General Sheet Metal Works, Inc., Silliman Av. & Ash St.,
 Bridgeport 5, Conn.
 General Tire & Rubber Co., Industrial Products Div., Wabash,
 Ind.
 General Water Heater Corp., Front St., & Magnolia Blvd., Box
 471, Burbank, Calif.
 Gerrett Corp., M. A. 724 W. Winnebago St., Milwaukee 5, Wis.
 Gerhardt, W. F., 2007 W. Broad St., Richmond 20, Va.
 Germatrol Corp., 622 Brookline Blvd., Pittsburgh 26, Pa.
 Gerhardt Co., Inc., George T., P. O. Box 516, Sausalito, Calif.
 Gerrard & Co., A. J., 1958 Hawthorne Ave., Melrose Park, Ill.
 Gerstein & Cooper Co., Inc., 1 W. 3rd St., South Boston, Mass.
 Gerwin Industries, Thermo-Base Div., 214 Spring St., Michigan
 City, Ind.
 Gibson Industries Inc., 2632 Park St., Muskegon Hts., Mich.
 Gibson Refrigerator Co., 515 W. Williams, Greenville, Mich.
 Gilbert & Barker Mfg. Co., West Springfield, Mass.
 Gillen Co., J. L., 12202 Wormer Ave., Detroit 39, Mich.
 Gilmore Burners, Inc., 1028 E. 134th St., Cleveland, O.
 Gisholt Machine Co., 1253 E. Washington Av., Madison 10,
 Wis.
 Glasby Mfg. Co., Inc., J. P., Montgomery & Willett Sts., Belle-
 ville 9, N. J.
 Glaser Lead Co., Inc., 31 Wyckoff Av., Brooklyn 37, N. Y.
 Glatt Co., Wm. E., 6549 N. Nixon, Chicago, Ill.

Glidden Co., 11001 Madison Av., Cleveland 2, Ohio.
 Globe Roofing Products Co., Inc., 2207 Schrage Av., Whiting, Ind.
 Goder Incinerator Corp., 407 S. Dearborn, Chicago 3, Ill.
 Goergen-Mackwirth Engineering Co., 813 Sycamore St., Buffalo 12, N. Y.
 Goethel Sheet Metal Works, Inc., Alfred, 3218 W. Fond du Lac Av., Milwaukee 10, Wis.
 Goldens' Foundry & Machine Co., P. O. Box 96, Columbus, Ga.
 Goldsmith Metal Lath Co., 4301 Chickering Ave., Cincinnati 32, Ohio.
 Gold Top Heating, Inc., 1400 E. 2nd St., Butte, Mont.
 Goodfellow Co., Inc., E. D., 496 E. Bodley Ave., Memphis, Tenn.
 Goodrich Chemical Co., B. F., 324 Rose Bldg., Cleveland, O.
 Goodrich Co., B. F., 300 S. Main St., Akron, Ohio.
 Goodrich Co., B. F., Sponge Products Div., 280 Derby Pl., Shelton, Conn.
 Goodyear Tire & Rubber Co., Inc., 1144 E. Market St., Akron 16, Ohio.
 Goss Gas, Inc., Rt. 8, Glenshaw, Pa.
 Governair Corp., 313 N. Blackwelder, Oklahoma City 4, Okla.
 Graham Hambly Co., 3625 S. Grand Av., Los Angeles 7, Calif.
 Graham Mfg. Corp., 31465 Stephenson Hwy., Royal Oak 4, Mich.
 Grand Island Furnace & Supply Co., 336 N. Elm St., Grand Island, Nebr.
 Grand Rapids Wire Products Co., 303 Front Av., N. W., Grand Rapids 4, Mich.
 Granite City Steel Co., 20th & Madison Av., Granite City, Ill.
 Gray, G. L., 295 East St., P. O. Box 520, New Haven 3, Conn.
 Gray & Dudley Co., 2300 Clifton Rd., Nashville, Tenn.
 Gray Metal Products, Inc., 30 Carleton St., Rochester 3, N. Y.
 Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill.
 Great Western Steel Co., 2300 W. 58th St., Chicago, Ill.
 Green Colonial Furnace Co., 322 S. W. Third St., Des Moines 7, Iowa.
 Greene, Tweed & Co., North Wales, Pa.
 Green Fire Brick Co., A. P., Mexico, Mo.
 Greenheck Bros. Mfg. Co., Schofield, Wis.
 Gries Reproducer Co., 125 Beachwood Ave., New Rochelle, N. Y.
 Grinnell Co., Inc., 260 W. Exchange St., Providence 1, R. I.
 Grob Inc., Grafton, Wis.
 Gross-Aire Mfg. Co., 9416 W. Milton Ave., St. Louis 14, Mo.
 Gross Furnace Mfg. Co., Inc., 146 W. Fourth St., Salem, Va.
 Grove Regulator Co., 6529 Hollis St., Oakland, Calif.
 Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill.
 Guardian Products Corp., 1215 E. 2nd St., Michigan City, Ind.
 Gustin-Bacon Mfg. Co., 210 West 10th St., Kansas City 7, Mo.

H

H. A. Mfg. Co., 1612 W. King St., York, Pa.
 H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa.
 H & H Research Co., 6303 Horatio Ave., Detroit 10, Mich.
 H-P Products, Inc., 510 W. Broad St., Louisville, Ohio.
 Haertel Co., Walter, 2840 - 4th Ave. S., Minneapolis, Minn.
 Hago Products, 1281 Springfield Ave., Irvington 11, N. J.
 Hague & Co., Inc., Alfred, 224 34th St., Brooklyn 32, N. Y.
 Hall-Neal Furnace Co., 1326 N. Capitol Ave., Indianapolis 7, Ind.
 Halstead & Mitchell, Bessemer Bldg., Pittsburgh 22, Pa.
 Hamilton Tool Co., The, 9th St. at Hanover, Hamilton, O.
 Hammel Radiator Engineering Co., 3348 Motor Av., Los Angeles 34, Calif.
 Hammett Electric Mfg. Co., 706 E. Eighteenth St., Kansas City 8, Mo.
 Hammond Machinery Builders, Inc., 1694 Douglas Av., Kalamazoo 34, Mich.
 Handley-Brown Heater Co., 2501 Brooklyn Rd., Jackson, Mich.
 Handy & Harman, 82 Fulton St., New York 38, N. Y.
 Haney Gas Burner & Engrs., 909 S. Myrtle Ave., Monrovia, Calif.
 Hanovia Chemical & Mfg. Co., 100 Chestnut St., Newark 3, N. J.
 Hansen Tool & Die Co., 1531 S. First St., Milwaukee, Wis.
 Hardeo Products, 3624 Jerusalem Ave., Wantagh, N. Y.
 Hammond Co., 2114 Woodland, Cleveland, O.
 Harnischfeger Corp., 4400 W. National Ave., Milwaukee 46, Wis.
 Harper Co., H. M., 8200 Lehigh Ave., Morton Grove, Ill.
 Harper Metal Products, Ltd., 27 Layne Pl., San Bruno, Calif.
 Harrington & King Perforating Co., 5649 Fillmore St., Chicago 44, Ill.
 Harris Caloric Co., 3501 Cass Av., N. W., Cleveland 2, Ohio
 Harris Machinery Co., 301 30th Ave., S. E., Minneapolis 14, Minn.

Harrison Sheet Steel Co., 4718 W. Fifth Av., Chicago 44, Ill.
 Hart & Cooley Mfg. Co., 500 E. Eighth St., Holland, Mich.
 Hart & Crouse Corp., 109 N. Warner St., Oneida, N. Y.
 Hart Heat Div., Avery Farm Machinery Co., Foot of Junction St., Peoria 2, Ill.
 Hart Mfg. Co., Bartholomew & Hamilton Sts., Hartford 1, Conn.
 Hartwell Co., 9035 Venice Blvd., Los Angeles 34, Calif.
 Hartwell & Sons, Inc., H. N., Park Square Bldg., Boston, Mass.
 Hartzell Propeller Fan Co., Div. Castle Hills Corp., 1023 Roosevelt Av., Piqua, Ohio.
 Harvey-Hill, Inc., 2209 Lynch St., St. Louis 18, Mo.
 Harvey Machine Co., Inc., 19200 S. Western Av., Torrance, Calif.
 Harvey, Inc., Sid, 100 E. Mineola Av., Valley Stream, N. Y.
 Harvey-Whipple, Inc., 2155 Columbus Ave., Springfield 1, Mass.
 Haskins Co., R. G., 2651 W. Harrison St., Chicago 12, Ill.
 Hasko Utilities Co., 879 Tenth Ave., New York 19, N. Y.
 Hassall, Inc., John, Westbury, L. I., N. Y.
 Hastings Air Conditioning Co., Inc., Box 474, 108 S. Colorado Av., Hastings, Nebr.
 Hastings Air Control, Inc., 3215 Leavenworth St., Omaha 3, Nebr.
 Hastings Instrument Co., Inc., Hampton, Va.
 Hauck Mfg. Co., 124-136 Tenth St., Brooklyn 13, N. Y.
 Hauserman Co., E. F., 6800 Grant Av., Cleveland 3, Ohio.
 Havig Corp., Newark, Del.
 Havens Structural Steel Co., 1713 Crystal Ave., Kansas City, Mo.
 Hayes Furnace & Mfg. & Supply Co., 2929 S. Fairfax Ave., Los Angeles 16, Calif.
 Hayes Products Co., Box 202, Portsmouth, Va.
 Hays Corp., 782 E. Eighth St., Michigan City, Ind.
 Hays Mfg. Co., 801 W. 12th St., Erie 6, Pa.
 Heatley Machine & Tool Co., 900-8 Summit St., Toledo, Ohio.
 Heaterator, Inc., E. Brighton & E. Glen Ave., Syracuse 3, N. Y.
 Heating Assurance, Inc., 124 E. Augusta Ave., Spokane 21, Wash.
 Heating Equipment Mfg. Co., 600 Indiana St., San Francisco 7, Calif.
 Heating Specialties Co., Carroll P. O., Baltimore 29, Md.
 Heat-Timer Corp., 637 Broadway, New York 12, N. Y.
 Heat-Well Mfg. Co., 152 Chestnut St., Oakland 20, Calif.
 Heat-X Inc., Brewster, N. Y.
 Heetlitter Co., 208 S. Blaine St., Newberg, Ore.
 Heidrich-Nourse Co., 631 E. 3rd St., Los Angeles 13, Calif.
 Heil Co., 3000 W. Montana St., Milwaukee 1, Wis.
 Heil Process Equipment Corp., 12901 Elmwood Ave., Cleveland, O.
 Heimback Incinerator Mfg. Co., St. Paul, Minn.
 Heinrich Tools, Inc., 1536 Clark St., Racine, Wis.
 Henderson Furnace & Mfg. Corp., Sebastopol, Calif.
 Hendley & Whittemore Co., 6 Blackhawk Blvd., Beloit, Wis.
 Hendrick Mfg. Co., 37 Dundaff St., Carbondale, Pa.
 Henry Furnace Co., Medina, Ohio.
 Henry Valve Co., 3215 North Ave., Melrose Park, Ill.
 Henry & Wright Div., Emhart Mfg. Co., 760 Windsor St., Hartford 1, Conn.
 Herco Oil Burner Corp., 131-135 Locust St., Lancaster, Pa.
 Hercules Chemical Co., Inc., 332 Canal St., New York 13, N. Y.
 Hercules Electric & Mfg. Co., Inc., 2500 Atlantic Av., Brooklyn 7, N. Y.
 Herman Body Co., 4400 Clayton Ave., St. Louis 10, Mo.
 Hershey Machine & Foundry Co., Manheim, Pa.
 Hess Co., The, 1855 S. 34th Ave., Chicago 30, Ill.
 Hetzel Roofing Products Co., Inc., 67 Main St., Newark 5, N. J.
 Hexdall Co., A. M., Morris, Ill.
 Highland Engineering Co., 1742 Berkeley St., Santa Monica, Calif.
 Hill & Co., E. Vernon, P. O. Box 189, Lake Geneva, Wis.
 Hillwood Mfg. Co., 21700 St. Clair Av., Cleveland 17, Ohio.
 Hi-Lok Mfg. Co., 1625 Massillon Rd., Akron, O.
 Hilo Varnish Corp., 376 Third St., Everett 49, Mass.
 Hinde & Dauch Paper Co., P. O. Box 861, Sandusky, Ohio.
 Hirschman-Pohle Co., Inc., 9 Lent Av., LeRoy, N. Y.
 Hobart Bros. Co., Canal Lock Square, Troy 1, Ohio.
 Hobsite Products Co., Inc., 308 Sussex St., Harrison, N. J.
 Holan Corp., J. H., 4100 W. 150th St., Cleveland, O.
 Hollup Corp., Div. National Cylinder Gas Co., 4700 W. 19th St., Chicago 30, Ill.
 Holly Mfg. Co., 875 S. Arroyo Parkway, Pasadena 2, Calif.
 Holtzer-Cabot Motor Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass.
 HomeEase Products Div. of Bogue Electric Mfg. Co., 52 Iowa Av., Paterson 3, N. J.
 Home Furnace Co., 280 E. 6th St., Holland, Mich.
 Hones, Inc., Charles A., 122 S. Grand Av., Baldwin, N. Y.
 Hoover Co., The, Electric Motor Div., 68 Brook Ave., North Plainfield, N. J.
 Horn Co., Inc., A. C. 10th St. & 44th Av., Long Island City 1, N. Y.

Hoskinson Free Heater Inc., 248-47 Jamaica Ave., Bellerose, L.I., N.Y.
 Hossfeld Mfg. Co., 460 W. Third St., Winona, Minn.
 Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill.
 Hoststream Heater Co., 2363 E. 69th St., Cleveland 4, Ohio.
 Howard Industries, Inc., Racine, Wis.
 Howard Iron Wks. & Alberger Heater Div., 287 Chicago St., Buffalo 4, N. Y.
 Howes-Woods Co., 210 Bridge St., Cambridge 41, Mass.
 Hoyt Heater Co. of No. Calif., 926 High St., Oakland, Calif.
 Hubbell Corp., Box 700, Hawley Rd., Mundelein, Ill.
 Hub Specialty Co., 33 Salem St., Reading, Mass.
 Huck Mfg. Co., 2480 Bellevue Ave., Detroit 7, Mich.
 Hugert Mfg. Co., Rt. 3 & Chippewa Lake Rd., Medina, Ohio.
 Hunter Fan & Ventilating Co., 400 S. Front St., Memphis 2, Tenn.
 Hunt Heater Corp., 220 Twelfth Ave., N., Nashville, Tenn.
 Hunt & Son, Inc., C. B., Salem, Ohio
 Hupp Corp., Globe Stamping Div., 1250 W. 76th St., Cleveland 2, Ohio.
 Hussey & Co., C. G., 2850 Second Av., Pittsburgh 19, Pa.
 Hutchinson Burner & Mfg. Co., 517 N. Main, Hutchinson, Kans.
 Hydrovalve Co., 1319 Utica Ave., Brooklyn 3, N. Y.
 Hy-Lo Burner Co., Inc., Eddington, Pa.
 Hynes & Cox Electric Corp., Cohoes Rd. & Elm St., Watervliet, N. Y.

Ideal Electric & Mfg. Co., E. First & Oak Sts., Mansfield, Ohio.
 Ideal Industries, Inc., 1084 Park Av., Sycamore, Ill.
 Ilg Electric Ventilating Co., 2850 N. Crawford Av., Chicago 41, Ill.
 Illinois Bronze Powder Co., Inc., 2023 S. Clark St., Chicago 16, Ill.
 Illinois Iron & Bolt Co., Carpentersville, Ill.
 Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill.
 Illinois Zinc Co., 2959 W. 47th St., Chicago 32, Ill.
 Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago 7, Ill.
 Imperial Electric Co., 64 Ira Av., Akron 9, Ohio.
 Independent Blade Co., P. O. Box 1482, Joliet, Ill.
 Independent Blade Co., 587 Thompson Ave., East Haven 12, Conn.
 Independent Nail & Packing Co., P. O. Box N. Bridgewater, Mass.
 Independent Register Co., 3747 E. 93rd St., Cleveland 5, Ohio.
 Industrial Brownhoist Corp., 135 Washington, Bay City, Mich.
 Industrial Engineering Corp., 206 N. Ninth St., Terre Haute, Ind.
 Industrial Equipment Co., The, Minster, O.
 Industrial Metal Protectives, 401 Homestead Av., Dayton, Ohio.
 Industrial Plastic Fabricators, Inc., Norwood, Mass.
 Industrial Products Div., B. F. Goodrich Rubber Co., Marietta, O.
 Industrial Screw Co., 711 W. Lake St., Chicago 6, Ill.
 Industrial Service Laboratories, 710 W. National Ave., Milwaukee 4, Wis.
 Industrial Sound Control, Inc., 45 Granby St., Hartford, Conn.
 Infra Insulation Inc., 525 Broadway, New York, N. Y.
 Ingersoll Conditioned Air Div., Borg-Warner Corp., 760 E. Vine St. Kalamazoo, Mich.
 Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.
 Ingram-Richardson Mfg. Co., Beaver Falls, Pa.
 Inland Heater Corp., 3402 University Ave., S.E., Minneapolis 14, Minn.
 Inland Steel Co., 38 S. Dearborn St., Chicago 3, Ill.
 Inland Steel Products Co., 4023 W. Burnham St., Milwaukee 1, Wis.
 Insto-Gas Corp., 1977 E. Woodbridge St., Detroit 7, Mich.
 Insulating Castable Corp., 130 W. Pleasant Ave., River Rouge 18, Mich.
 Insulating Equipment, Inc., 39 S. LaSalle St., Chicago 3, Ill.
 Insulation & Refractories Co., Williamson, N. Y.
 Insulite Div., Minnesota and Ontario Paper Co., 500 Baker Arcade Bldg., Minneapolis 2, Minn.
 Insul-Mastic Corp. of America, 7750 W. 61st Pl., Summit, Ill.
 Inter-Coastal Paint Co., 13th & Southern R. R. East St. Louis, Ill.
 International Engineering, Inc., 1145 Bolander, Dayton 1, Ohio.
 International Harvester Co., Motor Truck Div., 180 N. Michigan Ave., Chicago 1, Ill.
 International Heater Co., 101 Park Av., Utica 2, N. Y.
 International Mfg. Co., 600 E. Grand, Oklahoma City, Okla.
 International Metal Hose Co., Ashford Ave., Bellevue, O.
 International Metal Products Co., P. O. Box 1712, Phoenix, Ariz.
 International Molded Plastics, Inc., 4387 W. 35th St., Cleveland 9, O.
 International Nickel Co., Inc., 67 Wall St., New York 3, N. Y.

International Oil Burner Co., Park & Spring, St. Louis 10, Mo.
 International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill.
 International Rolling Mill Products Corp., 5000 S. Whipple St., Chicago, Ill.
 International Sales Co., 2045 Evans Av., San Francisco 24, Calif.
 International Steel Co., 1556 Edgar St., Evansville, Ind.
 International Vermiculite Co., Girard, Ill.
 Interstate Drop Forge Co., 4051 N. 27th St., Milwaukee, Wis.
 Interstate Machinery Co., Inc., 1433 W. Pershing Road, Chicago 9, Ill.
 Interstate Sales Co., 123 E. 18th St., New York 3, N. Y.
 Iona Ventilator Co., Inc., 2821-29 W. Dauphin St., Philadelphia 32, Pa.
 Iowa Paint Mfg. Co., Inc., 118-20 Eighth St., Des Moines 9, Iowa.
 Iron City Chemical & Construction Corp., Glycolator Sales & Service Div., P. O. Box 5814, Pittsburgh 9, Pa.
 Iron Fireman Mfg. Co., 3121 W. 106th St., Cleveland 11, Ohio.
 Iron-Hide Sales Co., Dock St., Matawan, N. J.
 Iron Lung Ventilator Co., 5403 Prospect Ave., Cleveland 3, Ohio.
 Irvington Varnish & Insulator Div., Minnesota Mining & Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J.

J & J Sheet Metal Co., 23836 Hoover Rd., Van Dyke, Mich.
 Jabsco Pump Co., 2031 N. Lincoln, Burbank, Calif.
 Jack & Heintz, Inc., 17600 Broadway, Cleveland 1, Ohio.
 Jacks-Evans Mfg. Co., 4427 Geraldine Ave., St. Louis 15, Mo.
 Jackson & Church Co., 321 N. Hamilton St., Saginaw 65, Mich.
 Jaco Devices Co., 98 High St., Hingham, Mass.
 Jamestown Metal Corp., 104 Blackstone Av., Jamestown 6, N. Y.
 Jan-Air Inc., Richmond, Ill.
 Jefferson Electric Co., 25th & Madison St., Bellwood, Ill.
 Jefferson Machine Tool Co., Fourth, Cutter & Sweeney Sts., Cincinnati 3, Ohio.
 Jenn Air Products Co., 1102 Stadium Dr., Indianapolis Ind.
 Jessop Steel Co., Washington, Pa.
 Jet-Heat, Inc., 152 S. Van Brunt St., Englewood, N. J.
 Jetronaire, Inc., 1100 E. Warrington, Pittsburgh 10, Pa.
 Johns-Manville, 22 E. 40th St., New York 16, N. Y.
 Johnson Co., S. T., 940 Arlington Ave., Oakland 8, Calif.
 Johnson Gas Appliance Co., 520 "E" Av., N. W., Cedar Rapids, Iowa.
 Johnson Heater Corp., 1 Winnisimmet St., Chelsea, Mass.
 Johnson, Inc., William, Brenner & Kent Sts., Newark 3, N. J.
 Johnson Ladder Shoe Co., Eau Claire, Wis.
 Johnson Machine & Press Corp., 620 W. Indiana Av., Elkhart, Ind.
 Johnson Mfg. Co., Inc., Mount Vernon, Iowa.
 Johnson Service Co., 507 E. Michigan St., Milwaukee 1, Wis.
 Johnston & Chapman Co., 2925 Carroll Ave., Chicago 12, Ill.
 Johnston Foil Mfg. Co., 6100 S. Broadway, St. Louis 11, Mo.
 Jones & Laughlin Steel Corp., 3 Gateway Center, Pittsburgh 30, Pa.
 Jones Machinery Div., Hewitt-Robins, Inc., 4401 W. Roosevelt Rd., Chicago 24, Ill.
 Jordan & Co., Inc., Paul R., 311 E. South St., Indianapolis 25, Ind.
 Joy Mfg. Co., Oliver Bldg., Pittsburgh 22, Pa.
 Jungers Stove & Range Co., Grafton, Wis.
 Junior Co., J. C., 444 E. 63rd St., Kansas City, Mo.
 Juniper Elbow Co., Inc., 72-15 Metropolitan Av., Middle Village, L. I., N. Y.
 Justrite Mfg. Co., 2061 N. Southport Ave., Chicago, Ill.

K-G Equipment Co. (Inc.), 1744 Lehigh St., Allentown, Pa.
 Kaiser Aluminum & Chemical Corp., 1924 Broadway, Oakland 12, Calif.
 Kalamazoo Furnace & Appliance Mfg. Co., 100 Rochester Ave., Kalamazoo, Mich.
 Kane & Roach, Inc., Niagara & Shonnard Sts., Syracuse 4, N. Y.
 Karyall Body, Inc., 8221 Clinton Rd., Cleveland 9, O.
 Kauffman Air Conditioning Corp., 4505 Olive St., St. Louis 8, Mo.
 Kaufman Co., H. J., 13215 Roselawn Ave., Detroit 38, Mich.
 Kaustine Furnace & Tank Corp., 1492 Washington Ave., Perry, N. Y.
 Kawneer Co., Niles, Mich.
 Kaykor Industries, Inc., Yardville, N. J.

Keasbey & Mattison Co., Butler Av., Ambler, Pa.
 Kackley Co., O. C., 3400 Cleveland St., Skokie, Ill.
 Kehm Co., 5000 S. Halsted St., Chicago, Ill.
 Keith Furnace Co., Dean Av., at E. 26th, Des Moines 17, Iowa.
 Keller Tool Div. Gardner-Denver Co., P. O. Box 268, Grand Haven, Mich.
 Kelvinator Div., American Motors Corp., 14250 Plymouth Rd., Detroit 32, Mich.
 Kenco Mfg. Co., 3211 Telegraph Rd., Los Angeles 22, Calif.
 Ken-Joy Gas Burner Co., 3231 W. National Av., Milwaukee 13, Wis.
 Kennametal Inc., Latrobe, Pa.
 Kennard Corp., 1819 S. Hanley Rd., St. Louis 17, Mo.
 Kensico Tube Co., Mt. Kisco, N. Y.
 Kent Co., Inc., 435 Canal St., Rome, N. Y.
 Kerner Incinerator Div., Morse-Boulger Destructor Co., 80 Fifth Ave., New York 11, N. Y.
 Kerotest Mfg. Co., 2325 Liberty Av., Pittsburgh 22, Pa.
 Kester Solder Co., 4201 Wrightwood Av., Chicago 39, Ill.
 Kett Tool Co., 5 E. 3rd St., Cincinnati 2, O.
 Keystone Asphalt Products Co., 101 E. Ontario St., Chicago 11, Ill.
 Keystone Flashing Co., 2310 N. 28th St., Philadelphia 32, Pa.
 Kidder Mfg. Co., Inc., J. F., 426 Colchester Av., Burlington, Vt.
 Kilbury Mfg. Co., Inc., 14529 Hawthorne Blvd., Lawndale, Calif.
 Kilgore, Inc., Westerville, O.
 Killam Gas Burner Co., 260 Broadway, Denver 9, Colo.
 Kimberly-Clark Corp., Neenah, Wis.
 Kindt-Collins Co., 12653 Elmwood Ave., Cleveland 11, Ohio.
 King Co., Box 178, Owatonna, Minn.
 King Refrigerator Co., 7602 Woodhaven Blvd., Glendale 27, N. Y.
 Kingsley Mfg. Co., 420 Howard Ave., New Haven, Conn.
 King Stove and Range Co., Sheffield, Ala.
 Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, O.
 Kirk & Son, Inc., Morris P., 2717 S. Indiana St., Los Angeles 23, Calif.
 Kirsch Co., Refrigeration Div., Sturgis, Mich.
 Kisco Boiler & Engineering Co., 2414 Dekalb St., St. Louis 4, Mo.
 Klauer Mfg. Co., 9th & Washington St., Dubuque, Iowa.
 Kleenair Furnace Co., 5329 N. E. Sandy Blvd., Portland 13, Ore.
 Kleen-Heat Inc., 1829 Carroll Av., Chicago 12, Ill.
 Kleer-Kleen Mfg. Co., 140 Orchard Ave., Hayward, Calif.
 Klem Chemicals, Inc., 14401 Lanson Av., Dearborn, Mich.
 Klemm Automatic Products Co., 1718 N. Damen Ave., Chicago 47, Ill.
 Klenk's Aviation Snips, 107 E. 5th St., Wilmington, Del.
 Kling Bros. Engineering Works, 1320 N. Kostner Ave., Chicago 51, Ill.
 Klippel Mfg. Co., 1075 Lincoln Ave., Hamilton, Ohio.
 Kloppenborg Aluminum Foundry, 211 Marquette St., Davenport, Iowa.
 Knapp Bros. Mfg. Co., 16 E. 72nd St., Cincinnati 16, O.
 Knights Co., James, Sandwich, Ill.
 Knobloch Co., Jim, 2301 Alexandria, Newport, Ky.
 Knowles Mushroom Ventilator Co., 160 Bellevue Ave., Upper Montclair, N. J.
 Koch Refrigerators, Inc., 401 Funston Rd., Kansas City 15, Kans.
 Kolb Refractories Co., Meadow & Jackson Sts., Philadelphia, Pa.
 Kol-Master Corp., Oregon, Ill.
 Kool Air Engineering Co., 1388 Fairfax Dr., San Bernardino, Calif.
 Koolvent Metal Awning Corp., of America, P. O. Box 9336, Pittsburgh 23, Pa.
 Koppers Co., Inc., Tar Products Div., Koppers Bldg., Pittsburgh 19, Pa.
 Korfund Co., 48-01-A 32nd Pl., Long Island City 1, N. Y.
 Ko-Z-Aire Products, Inc., Red Oak, Iowa.
 Kraissl Co., Inc., Terhune & Williams Aves., Hackensack, N. J.
 Kramer Bros. Foundry Co., 17 Dell St., Dayton 4, Ohio.
 Kramer Trenton Co., N. Olden & Breunig Ave., Trenton 5, N. J.
 Kraus Mfg. Co., Chas. E., 122 S. 8th St., Louisville 2, Ky.
 Kresky Mfg. Co., Inc., Second & H Sts., Petaluma, Calif.
 Kresno-Stamm Mfg. Co., 421 Broad St., Palisades Park, N. J.
 Kritzer Radiant Coils, Inc., 2901 Lawrence Ave., Chicago 25, Ill.
 Krueger Air Conditioning Co., 19 E. Rillito St., Tucson, Ariz.
 Krueger Sentry Gauge Co., Green Bay, Wis.

L

L. O. F Glass Fibers Co., 1810 Madison Ave., Toledo, O.
 Laclede Steel Co., Arcade Bldg., St. Louis 1, Mo.
 Laco Oil Burner Co., Inc., 238 Union St., Griswold, Iowa.
 LaCrosse Steel Roofing & Corrugating Co., 227 Jay St., LaCrosse, Wis.

Laharco Industries, 721 2nd Ave., N., Minneapolis 5, Minn.
 Lake Chemical Co., 3052 W. Carroll Ave., Chicago 12, Ill.
 Lakewood Engineering & Mfg. Co., 1756 W. Lake St., Chicago 12, Ill.
 Lamb Electric Co., 627 Lake St., Kent, Ohio.
 Lammert & Mann Co., Wood & Walnut Sts., Chicago 12, Ill.
 Lamson Mobilift Corp., 1604 S. W. 10th Ave., Portland 1, Ore.
 Langsenkamp Co., F. H., 229 E. South St., Indianapolis 23, Ind.
 Lapeer Mfg. Co., 1144 W. Baltimore, Detroit 2, Mich.
 Larkin Coils, Inc., 519 Memorial Dr., S. E., Atlanta 1, Ga.
 Lastik Products Co., Inc., 203 Iroquois Bldg., Pittsburgh 13, Pa.
 Lau Blower Co., 2005 Home Av., Dayton 7, Ohio.
 Lawson Mfg. Co., Box 133, New Kensington, Pa.
 Leas Co., H. Leslie, Monona, Iowa.
 Lee Co., K. O., Congress at 1st, Aberdeen, S. Dak.
 Lee Corporation, P. O. Box 1801, Wilmington, Del.
 Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia 44, Pa.
 Leeson Air Conditioning Corp., 14631 Meyers Rd., Detroit 27, Mich.
 Lehigh Fan & Blower Co., 730 N. 17th St., Allentown, Pa.
 Lehigh Mfg. Co., P. O. Box 1418, Lancaster, Pa.
 Leisur-Maid Mfg. Corp., 338 Wealthy St., S. W., Grand Rapids 3, Mich.
 Leland Electric Co., Div. American Machine & Foundry Co., 1501 Webster St., Dayton 1, Ohio.
 Lenk Mfg. Co., 30-38 Cummington St., Boston 15, Mass.
 Lennox Industries, Inc., 200 S. 12th Av., Marshalltown, Iowa; 1705 Olentangy River Rd., Columbus, Ohio; 400 N. Midler Av., Syracuse, N. Y.
 Lepick Heater Co., 1742 Fourth Ave., S., Seattle 4, Wash.
 Leslie Welding Co., Inc., 2943 Carroll Ave., Chicago 12, Ill.
 Levow, David, 308 W. 20th St., New York 11, N. Y.
 Lewellen Mfg. Co., Columbus, Ind.
 Lewin-Mathes Co., Lewin Metals Div., 12th & Chouteau Sts., St. Louis 2, Mo.
 Lewyt Air-Conditioner Corp., 5702 First Ave., Brooklyn 19, N. Y.
 Lexauco, Inc., 4815 Lexington Ave., Cleveland 3, Ohio.
 L'Hommedieu & Sons Co., Chas. F., 4521 Ogden Av., Chicago 23, Ill.
 Libert Machine Co., 324 N. Roosevelt St., Green Bay, Wis.
 Liberty Combustion Corp., 240 Court St. Rd., P. O. Box 300, Syracuse 1, N. Y.
 Lignum-Vitae Products Corp., 906 Boyd Av., Jersey City, N. J.
 Lillie-Hoffmann Cooling Towers, Inc., 1450 S. Vandeventer Ave., St. Louis 10, Mo.
 Lima Electric Motor Co., The, Dept. 10, Lima, O.
 Lima Register Co., 651 N. Baxter St., Lima, Ohio.
 Lincoln Brass Works, 2067-12th St., Detroit, Mich.
 Lincoln Electric Co., 22801 St. Clair Av., Cleveland 17, Ohio.
 Lincoln Furnace Co., Inc., 230-244 Goffle Rd., Hawthorne, N. J.
 Linde Air Products Co., Div. Union Carbide & Carbon Corp., 30 E. 42nd St., New York 17, N. Y.
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill.
 Lion Fastener Co., Inc., Honeye Falls, N. Y.
 Lipman Refrigeration Div., Yates-American Machine Co., Beloit, Wis.
 Liquid Carbonic Corp., Industrial Gas Div., 3100 S. Kedzie Av., Chicago 23, Ill.
 Liquidepth Indicators, Inc., 43-22 Tenth St., Long Island City 1, N. Y.
 Liquidometer Corp., Skillman Av., 36th and 37th Sts., Long Island City 1, N. Y.
 Liquid Plastics Corp., 50-02 23rd St., Long Island City 1, N. Y.
 Little Burner Co., Inc., H. C. Woodland Ave. & Du Bois St., San Rafael, Calif.
 Littleford Bros., Inc., 453 E. Pearl St., Cincinnati 2, Ohio.
 Little Giant Vaporizer Co., 5101 Classen Blvd., Oklahoma City 18, Okla.
 Livingston, Inc., Kalamazoo Av., Marshall, Mich.
 Locke Regulator Co., Walter and Osborne Sts., Salem, Mass.
 Locke Stove Co., 114 W. 11th St., Kansas City 5, Mo.
 Lockformer Co., 4615 Roosevelt Rd., Chicago 50, Ill.
 Lockhart Mfg. Corp., 6350 E. Davison, Detroit 12, Mich.
 Lockport Mills Inc., Lockport, N. Y.
 London Chemical Co., 1535 N. 31st Ave., Melrose Park, Ill.
 Lord Mfg. Co., 1635 W. 12th St., Erie, Pa.
 Los Angeles Sheet Metal Mfg. Co., Inc., 900 E. Ninth St., Los Angeles 21, Calif.
 Louvra Corp., 1010 Jeanette Ave., Union, N. J.
 Lovejoy Flexible Coupling Co., 4841 Lake St., Chicago 44, Ill.
 Lovekin Water Heater Co., 21-43 Laurel St., Philadelphia 23, Pa.
 Lufkin Rule Co., Saginaw, Mich.
 Lug-All Co., 355 Lancaster Ave., Haverford, Pa.
 Lukens Metal Co., Thos. F., Hedley & Bath Sts., Philadelphia 37, Pa.
 Lukens Steel Co., 308 S. First Ave., Coatesville, Pa.

Lumm Co., A. H., 2512 Albion St., Toledo 6, Ohio.
 Lundt, Inc., Ernest C., Route 46, P. O. Box 216, Little Falls, N. J.
 Lustrik, Inc., 3324 Frankford Av., Philadelphia 4, Pa.
 Luty Furnace Mfg. Co., 8321 W. Davison Ave. Detroit 38, Mich.
 Lyman Co., H. B., Southampton, Hampshire Co., Mass.
 Lynch Asbestos Co., 939 S. Sunol Dr., Los Angeles 23, Calif.
 Lynch & Sons, Kenneth, 80 Main Ave., Wilton, Conn.
 Lynn Products Co., 17 Willow St., Lynn, Mass.
 Lyon Metal Products, Inc., 740 Madison Av., Aurora, Ill.
 Lyons, Edward W., 115 W. Glenaven Ave., Youngstown 7, O.

M

MB Mfg. Co., Div. of Textron American, Inc., 1060 State St., New Haven 11, Conn.
 M & E Mfg. Co., 2581 W. Winthrop, Indianapolis 5, Ind.
 Madden Brass Products Co., P. O. Box 444, Aurora, Ill.
 Madden Corp., The, 1543 Morse Ave., Chicago, Ill.
 Made-Rite Co., Inc., 10th & Monroe St., Newport, Ky.
 Magic Aire Div., United Electric Co. 500 Block Galveston St., Wichita Falls, Tex.
 Magic Chemical Co., 121 Crescent St., Brockton 2, Mass.
 Magic Servant Products Co., 15211 Joy Rd., Detroit 28, Mich.
 MaGirl Foundry & Furnace Co., 413 E. Oakland Ave., Bloomington, Ill.
 Magnatool Div., Multifinish Mfg. Co., 26341 W. Eight Mile Rd., Detroit 19, Mich.
 Magnus Chemical Co., Garwood, N. J.
 Mahon Co., R. C., 6565 E. 8 Mile Rd., Detroit 34, Mich.
 Maid-O'-Mist Inc., 3217 N. Pulaski Rd., Chicago 41, Ill.
 Majestic Co., Inc., 733 Erie St., Huntington, Ind.
 Major Controls Co., Highway 71 and Yorba Rd., P. O. Box 537, Corona, Calif.
 Major Metal Products, Inc., 707 E. 61st St., Los Angeles 1, Calif.
 Malco Products, 4224 26th Ave., S., Minneapolis, Minn.
 Mall Tool Co., 7740 South Chicago Av., Chicago 19, Ill.
 Malleable Iron Fittings Co., Lock Box 231, Branford, Conn.
 Mallory Co., P. R., 3029 E. Washington, Indianapolis 6, Ind.
 Malm Mfg. Co., 1565 Como Ave., St. Paul, Minn.
 Mammoth Furnace Co., 509 Vandalia St., St. Paul 4, Minn.
 Manchester Machine Corp., The, Box 724, Manchester, Conn.
 Manhattan Perforated Metal Co., Inc., 43-17 37th St., Long Island City 1, N. Y.
 Manheim Mfg. and Belting Co., 272 Stiegel St., Manheim, Pa.
 Manning Co., Charles E., 90 Clairton Blvd., Pittsburgh 36, Pa.
 Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn.
 Mapes Industries, Inc., 340 S. 12th St., Lincoln 8, Nebr.
 Maplewood Machinery Co., 2634 Fullerton Ave., Chicago 47, Ill.
 Marathon Electric Mfg. Corp., Cherry & Randolph Sts., Wausau, Wis.
 Marble-Card Electric Corp., Gladstone, Mich.
 Marco Co., 45 Greenwood Ave., East Orange, N. J.
 Marco Industries, Inc., Third & Franklin St., Womelsdorf, Pa.
 Marine Electrolysis Eliminator Co., 617 Dearborn St., Seattle, Wash.
 Market Forge Co., Everett 49, Mass.
 Marley Co., The, 222 W. Gregory Blvd., Kansas City 14, Mo.
 Marlo Coil Co., 6135 Manchester Av., St. Louis 10, Mo.
 Marquart Mfg. Co., 1241 High St., Oakland 1, Calif.
 Marquette Mfg. Co., Inc., 307 E. Hennepin Ave., Minneapolis 14, Minn.
 Marshalltown Mfg. Co., 901 E. Nevada St., Marshalltown, Iowa.
 Marsh Corp., Jas. P., Skokie, Ill.
 Martens & Stormoen Co., 231 Willard St., West Quincy 69, Mass.
 Martin Fan & Blower Co., 4634 W. 21st Place, Chicago 50, Ill.
 Martin Co., Inc., J. O., 637 Minna St., San Francisco 3, Calif.
 Martin Stamping & Stove Co., Huntsville, Ala.
 Marvair Div., Muncie Gear Works, Inc., 700 N. Wysor, Muncie, Ind.
 Marvin Mfg. Co., 3071 E. 12th St., Los Angeles 23, Calif.
 Marviray, Inc., 54 Clifton St., Newark 5, N. J.
 Master Appliance Mfg. Co., 4th & Ontario St., Racine, Wis.
 Master-Craft Supply Co., Inc., 36 Division St., Haverstraw, N. Y.
 Master Electric Co., 126 Davis Av., Dayton 1, Ohio.
 Master Vibrator Co., 1752 Stanley, Dayton, O.
 Matt Coil-Less Burner Co., 4015 W. Lake St., Chicago 24, Ill.
 Matthiessen & Hegeler Zinc Co., LaSalle, Ill.
 Maurer Engineering 2525 Colfax St., Evanston, Ill.
 Maurey Mfg. Corp., 2915 S. Wabash Av., Chicago 16, Ill.
 Maxant Button & Supply Co., 117 S. Morgan St., Chicago 7, Ill.
 Maxitrol Co., 12200 Beech Rd., Detroit 39, Mich.
 Maxwell Steel Co., 400 Riverside Dr., Fort Worth, Tex.

Mayflower Air Conditioners, Inc., Duluth Av. & E. Seventh St., St. Paul 6, Minn.
 Mayne Products Co., 324 Harries Bldg., Dayton 2, Ohio.
 Mayson Mfg. Co., 4332 Horatio St., Detroit 10, Mich.
 Maze Co., W. H., Peru, Ill.
 McCabe Powers Auto Body Co., 5900 N. Broadway, St. Louis, Mo.
 McCollum Hoist & Mfg. Co., 721 Rogers St., Downers Grove, Ill.
 McCord Corp., 2587 E. Grand Blvd., Detroit 11, Mich.
 McCorkle Co., D. H., Sixth & Bancroft Way, Berkeley 2, Calif.
 McDaniel Mfg. Co., Inc., 1012 Powhattan St., Dallas 2, Texas.
 McDonald Mfg. Co., A. Y., 12th & Pine Sts., Dubuque, Ia.
 McDonnell & Miller, Inc., 3500 N. Spaulding Av., Chicago 18, Ill.
 McGraw Electric Co., Clark Div., 5201 W. 65th St., Chicago 38, Ill.
 McGraw Electric Co., Lonergan Mfg. Div., 704 Clark St., Albion, Mich.
 McIntire Co., Okner Parkway, P. O. Box 5, Livingston, N. J.
 McKay Co., 1005 Liberty Ave., Pittsburgh 22, Pa.
 McKee Furnace Co., 3861 Freemont Av., N., Minneapolis 12, Minn.
 McLarty Systems, 2600 Dickman, Battle Creek, Mich.
 McLean Engineering Laboratories, P. O. Box 228, Princeton, N. J.
 McLouth Steel Corp., 300 S. Livermoir, Detroit 17, Mich.
 McMillan & Co., W. W., P. O. Box 5064, Jacksonville 7, Fla.
 McPherson Furnace & Supply Co., 1805 N. E. 2nd Ave., Portland 12, Ore.
 McQuay, Inc., 1600 Broadway, N. E., Minneapolis 13, Minn.
 McQuay-Norris Mfg. Co., Southwest Ave. at Marconi, St. Louis, 10, Mo.
 Meadows, Inc., W. R., 2 Kimball St., Elgin, Ill.
 Meier Electric & Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind.
 Melaway Corp., Box 248, Brandon, Wis.
 Melchior, Armstrong, Dessau Co., Ridgefield, N. J.
 Melco Products, Inc., 301 5th Ave., S., Minneapolis, Minn.
 Mel-Gauge Co., P. O. Box 126, Station A, New Haven, Conn.
 Merchandising and Mfg. Associates, Inc., 53 North Duke St., Lancaster, Pa.
 Mercom Corp., 4201 Belmont Av., Chicago 41, Ill.
 Meriam Instrument Co., 10920 Madison Av., Cleveland 2, Ohio.
 Metalcraft Engineering Co., 3625 N. 48th St., Lincoln, Nebr.
 Metalcraft, Inc., Mason City, Iowa.
 Metal Fabricators, Inc., P. O. Box 3232, Charlotte 3, N. C.
 Metalloy Products Co., 1351 E. 17th St., Los Angeles, Calif.
 Metalmen, Inc., 2100 W. Grand Ave., Chicago 12, Ill.
 Metals Div., Olin Mathieson Chemical Corp., East Alton, Ill.
 Metal & Thermit Corp., 100 E. 42nd St., New York 17, N. Y.
 Metro Metal Mfg. Co., Holt, Mich.
 Metromatic Mfg. Co., 15 Winchester St., Medford, Mass.
 Metropolitan Refining Co., Inc., 50-23 23rd St., Long Island City 1, N. Y.
 Metzger Machine & Engineering Co., 6770 N. 43rd St., Milwaukee 9, Wis.
 Metzner Stove and Furnace Supply Co., 413 Delaware St., Kansas City 5, Mo.
 Meyer & Bro. Co., F., 308 S. Commercial St., Peoria, Ill.
 Meyer Furnace Co., 1300 S. Washington St., Peoria 1, Ill.
 Meyer & Sons, Inc., W. W., 8257 Elmwood Ave., Skokie, Ill.
 Michigan Steel Tube Products Co., Holbrook & Buffalo Aves., Detroit 12, Mich.
 Micro Products Co., 20 N. Wacker Dr., Chicago 6, Ill.
 Micro Scotch Heater Corp., Subsidiary of Micro-Moisture Controls, Inc., 22 Jericho Turnpike, Mineola, N. Y.
 Microtron Corp., P. O. Box 2092, Charlotte, N. C.
 Midco Register Corp., 1059 Grand Av., St. Paul 3, Minn.
 Mid-Continent Metal Products Co., 1960 Clybourn Av., Chicago 14, Ill.
 Midland Paint & Varnish Co., 3801 E. 91st St., Cleveland 3, Ohio.
 Mid-States Welder Mfg. Co., 6025 S. Ashland Ave., Chicago 36, Ill.
 Midwest Automatic Control Co., 510 Third St., Des Moines 9, Iowa.
 Midwest Mfg. Co., 2205 Haskell Ave., Lawrence, Kans.
 Miller & Doing, 89 Adams St., Brooklyn 1, N. Y.
 Miller Electric Mfg. Co., Inc., 718 S. Bounds St., Appleton, Wis.
 Miller-Harris Instrument Co., 601 E. Ogden Av., Milwaukee 2, Wis.
 Miller Product Co., 3046 Cedar Rd., Hwy. 127, Lansing 9, Mich.
 Millers Falls Co., 57 Wells St., Greenfield, Mass.
 Mills Corp., Elmer E., 2930 N. Ashland Ave., Chicago 13, Ill.
 Milwaukee Brush Mfg. Co., 2236 N. 30th St., Milwaukee, Wis.
 Milwaukee Electric Tool Corp., 5362 W. State St., Milwaukee 8, Wis.
 Milwaukee Gas Specialty Co., P. O. Box 461, Milwaukee 1, Wis.

Mine Safety Appliance Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.
 Minneapolis-Honeywell Regulator Co., 2726 Fourth Av. S., Minneapolis 8, Minn.
 Minnesota Mining & Mfg. Co., Adhesives & Coatings Div., 411 Piquette, Detroit, Mich.
 Minnesota Mining & Mfg. Co., 900 Fauquier Ave., St. Paul, Minn.
 Minnesota & Ontario Paper Co., Investors Bldg., Minneapolis, Minn.
 Minn-Kota Foundry & Mfg. Co., P. O. Box 822, Fargo, N. Dak.
 Miracle Adhesives Corp., 214 E. 33rd St., New York, N. Y.
 Miracle Rod Co. of Illinois, 612 N. Michigan Ave., Chicago 11, Ill.
 Mirror Patented Stove Pipe Co., 65 Park St., Hartford, Conn.
 Misener Mfg. Co., Inc., 202-8 Walton St., Syracuse 2, N. Y.
 Mission Appliance Corp., 12611 S. Crenshaw Blvd., Hawthorne, Calif.
 Mitchell & Co., Inc., W. K., 29th & Ellsworth, Philadelphia 46, Pa.
 Mitchell Mfg. Co., 2525 N. Clybourn Ave., Chicago, Ill.
 Modern Controls Corp., 24400 Mound Rd., Centerline, Mich.
 Modern Die & Machine Co., 166 Pleasant St., Boston 25, Mass.
 Modern Engineering Co., 3411 Pine Blvd., St. Louis 3, Mo.
 Modern Materials Co., 46330 W. 7 Mile Rd., Northville, Mich.
 Modine Mfg. Co., 1580 DeKoven Ave., Racine, Wis.
 Moeller Instrument Co., 132nd St. & 89th Av., Richmond Hill 18, N. Y.
 Moeschl-Edwards Corrugating Co., Inc., P. O. Box 1115, Cincinnati, Ohio.
 Molloy Machine Corp., 3445 N. Western Ave., Chicago 18, Ill.
 Monarch Mfg. Works, Inc., 2501 E. Ontario St., Philadelphia 34, Pa.
 Moncrief Furnace Co., P. O. Box 1673, Atlanta 1, Ga.
 Moncrief Lenoir Mfg. Co., 2103 Lyons, Houston, Tex.
 Monitor Controller Co., Div. of Ultrasonic Corp., 640 Memorial Dr., Cambridge, Mass.
 Monogram Products Co., Inc., 731 N. 35th St., Philadelphia 4, Pa.
 Monsanto Chemical Co., 1700 S. 2nd St., St. Louis, Mo.
 Montag Inc., 2011 N. Columbia Blvd., Portland 17, Ore.
 Montgomery Chemical Co., Jenkintown, Pa.
 Moore Co., 800 S. Missouri, Marceline, Mo.
 Moore, Inc., Goodloe E., 2811 N. Vermillion St., Danville, Ill.
 Moreheat Distribution Co., 5608 Stewart, Cincinnati, O.
 Morey, Dan, 814-816 S. Robertson Blvd., Los Angeles 35, Calif.
 Mor-Flo Heater Corp., 2174 E. 76th St., Cleveland 3, O.
 Morrill Motors, 3119 Fairfield Ave., Fort Wayne, Ind.
 Morris Paint & Varnish Co., 27th & Douglas Sts., Omaha, Nebr.
 Morris Sheet Metal Works, 635 W. Mound St., Columbus 23, O.
 Morrison Products, Inc., 16816 Waterloo Rd., Cleveland 10, Ohio.
 Morrison Steel Products, Inc., 601 Amherst St., Buffalo 7, N. Y.
 Morse-Smith-Morse Co., The, 165 Dexter Ave., Watertown 72, Mass.
 Mortell Co., J. W., Hobbie Av. & Big Four R.R., Kankakee, Ill.
 Mortemp Div., Mechanical Products Co., 1727 First Ave., S., Seattle 4, Wash.
 Mortemp Products Corp., Box 386, Rockville, Md.
 Morton Engineering Services, Paul S., 609 Bangor Rd., Lawrence, Mich.
 Moser & Son Mfg. Co., 227 E. Washington St., Bluffton, Ind.
 Mountain States Equipment Co., 1238 Speer Blvd., Denver 4, Colo.
 Mt. Hawley Mfg. Co., Mt. Hawley Airport, Peoria 4, Ill.
 Mt. Vernon Furnace & Mfg. Co., P. O. Box 213, Mt. Vernon, Ill.
 Muckle Mfg. Co., Owatonna, Minn.
 Mueller Brass Co., 1925 Laneer Av., Port Huron, Mich.
 Mueller Climatrol, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.
 Mueller Co., 512 W. Cerro Gordo St., Decatur, Ill.
 Mulkey Co., J. F., W. 8 Mile & Telegraph Rds., Detroit 19, Mich.
 Multi-Therm Mfg. Co., Inc., 11637 Linwood, Detroit 6, Mich.
 Muncie Burner Mfg. Co., 27293 Eureka Rd., Romulus, Mich.
 Mundet Cork Corp., 7101 Tonnelle Ave., North Bergen, N. J.
 Mundt & Sons, Charles, 53 Fairmont Av., Jersey City 4, N. J.
 Murray Co. of Texas, Inc., 3200 Canton St., Dallas 1, Texas.
 Mustee Heater Co., 3409 Superior Av., Cleveland 14, Ohio.
 Mutual Liquid Gas & Equipment Co., 17117 S. Broadway, Gardena, Calif.
 Myers Electric Co., Inc., 209 First Av., Pittsburgh 22, Pa.

N

Nat. Corp., 2710 McGee Trafficway, Kansas City 8, Mo.
 National Airoil Burner Co., Inc., 1336 E. Sedgley Av., Philadelphia 34, Pa.
 National Appliances, Inc., P. O. Box 173, New Kensington, Pa.

National Cork Co., 1 Eagle St., Englewood, N. J.
 National Cylinder Gas Co., 840 N. Michigan Av., Chicago 11, Ill.
 National Electric Welding Machines Co., 1846 N. Trumbull St., Bay City, Mich.
 National Engineering & Mfg. Co., 16th & Lamie St., Sedalia, Mo.
 National Engineering Products, Inc., Commerce & Savings Bldg., Washington, D. C.
 National Foundry & Furnace Co., Station "B," Dayton 7, Ohio.
 National Fuel Conservation Co., Inc., 257 Battle Av., White Plains, N. Y.
 National Gas Equipment Co., Inc., P. O. Box 122, Denison, Tex.
 National Grille & Register Co., 3169 E. 80th, Cleveland, O.
 National Gypsum Co., 325 Delaware Av., Buffalo 2, N. Y.
 National Heater Co., 2180 Cleora Av., St. Paul 4, Minn.
 National Lead Co., 111 Broadway, New York 6, N. Y.
 National Lock Co., 1902 Seventh St., Rockford, Ill.
 National Mfg. Corp., 155 Fillmore Av., Tonawanda, N. Y.
 National Metal Fabricators, 2136 S. Sawyer Av., Chicago 23, Ill.
 National Modulation Co., 2720 N. Hy. 61, St. Paul 9, Minn.
 National Pipe Bending Co., 122 River St., New Haven 13, Conn.
 National Steel Construction Co., Inc., 301 Water St., Logansport, Ind.
 National Super Service Co., Inc., 1944 N. 13th St., Toledo 2, Ohio.
 National Tube Div., U. S. Steel Corp., 525 William Penn Pl., Pittsburgh 30, Pa.
 National-U. S. Radiator Corp., 221 Central Ave., Johnstown, Pa.
 National Welding Equipment, 218 Fremont St., San Francisco, Calif.
 Nebel Mfg. Co., P. O. Box 3942, Shaker Sq. Station, Cleveland 20, Ohio.
 Neff-Perkins Co., 2130 St. Clair, Cleveland, O.
 Neilson Chemical Co., 6564 Benson St., Detroit 7, Mich.
 Nelson Bros. & Strom Co., 1620 Racine St., Racine, Wis.
 Nelson Industries, 115 E. Carson St., Pittsburgh, Pa.
 Nelson Products, Herman, American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.
 Nelson Stud Welding Div., Gregory Industries, Inc., Toledo Av. & E. 28th St., Lorain, Ohio.
 Nesbitt, Inc., John J., State Rd. & Rhawn St., Philadelphia 36, Pa.
 New-Aire Blower Co., 25425 John R. St., Royal Oak, Mich.
 New Albany Machine Mfg. Co., E. 10th & Water Sts., New Albany, Ind.
 Newcomb-Detroit Co., 5741 Russell St., Detroit 11, Mich.
 New Delphos Mfg. Co., 102 S. Pierce St., Delphos, Ohio.
 New England Carbide Tool Co., Inc., 60 Brookline St., Cambridge 39, Mass.
 New Jersey Zinc Co., 160 Front St., New York 38, N. Y.
 Newman Industries America Inc., 43 Broad St., New York 4, N. Y.
 New Monarch Machine & Stamping Co., 406 S. W. 9th St., Des Moines 9, Iowa.
 New Plastic Corp., 1026 N. Sycamore, Hollywood 38, Calif.
 Newport Steel Corp., Newport, Ky.
 New York Belting & Packing Co., 1 Market St., Passaic, N. J.
 New York Blower Co., 3155 Shields Av., Chicago 16, Ill.
 Niagara Blower Co., 405 Lexington Ave., New York 17, N. Y.
 Niagara Machine & Tool Works, 637-697 Northland Av., Buffalo 11, N. Y.
 Niagara Motors Corp., Dunkirk, N. Y.
 Niagara Products Co., 4311 E. Thomas Rd., Phoenix, Ariz.
 Nicework Metal Products Co., Leedsdale, Pa.
 Nichols Wire & Aluminum Co., Davenport, Iowa.
 Nielson, Inc., E. V., 128 Broad St., Stamford, Conn.
 Noble & Stanton, Inc., 1035 Broadway, Bedford, Ohio.
 Nobur Mfg. Co., 717 N. Victory Blvd., Burbank, Calif.
 Nooter Corp., 1400 S. Second St., St. Louis 4, Mo.
 Nord Corp., 22 Spruce St., Nutley, N. J.
 Norge Div., Borg-Warner Corp., Merchandise Mart Plaza, Chicago 54, Ill.
 Norma-Hoffmann Bearings Corp., Stamford, Conn.
 Norman Chemical Co., 470 Cleveland Ave., N., St. Paul 4, Minn.
 Norman Products Co., Inc., 1150 Chesapeake Av., Columbus 12, Ohio.
 Norris-Thermador Corp., 5215 S. Boyle Ave., Los Angeles 38, Calif.
 Norristown Magnesia & Asbestos Co., Washington St. below Ford St., Norristown, Pa.
 Norse Boiler Co., Stelton Rd., New Market, N. J.
 North American Mogul Products Co., Standard Building, Cleveland 13, Ohio.
 Northern Blower Co., 6409 Barberton Av., Cleveland 2, Ohio.
 Northern Indiana Brass Co., 935 Plum St., Elkhart, Ind.
 Northern Steel & Stoker Corp., 3100 Prospect Rd., Peoria 4, Ill.

North Shore Nameplate Inc., 214-27 Northern Blvd., Bayside, L. I., N. Y.
 Northwest Foundry & Furnace Co., 2345 S. E. Gladstone St., Portland 2, Ore.
 Northwest Lead Co., 2700 16th Av., S. W., Seattle 4, Wash.
 Northwest Metal Products, Inc., 55 Spokane St., Seattle 4, Wash.
 Northwestern Stove Repair Co., 662 W. Roosevelt Rd., Chicago 7, Ill.
 Nortmann-Duffke Co., 2740 S. 32nd St., Milwaukee 46, Wis.
 Norwalk Air Conditioning Corp., 138 Water St., South Norwalk, Conn.
 NuSteel Co., 1714 S. Ashland Av., Chicago 8, Ill.
 NuTone, Inc., Madison & Red Bank Rd., Cincinnati, Ohio.
 Nu-Way Corp., The, 2416 Fourth St., Rock Island, Ill.

O

Oakite Products Inc., 19 Rector St., New York 6, N. Y.
 Oddyke, Inc., Benjamin P., 447 N. Eighth St., Philadelphia 23, Pa.
 Octagon Ventilator Co., 5828-30 S. Oakley Av., Chicago 36, Ill.
 Ohio Electric Mfg. Co., 5910 Maurice Ave., Cleveland 4, Ohio.
 Ohio Foundry & Mfg. Co., Penn R. R. & Slack St., Steubenville, Ohio.
 Ohio Hoist & Mfg. Co., Inc., 13111 Shaker Sq., Cleveland 20, O.
 Ohio Paper Co., Miamisburg, Ohio.
 Ohio Sheet Metal Die Co., 14689 Euclid Ave., Cleveland, O.
 Ohio Valley Hardware Co., Inc., 300 Fourth Ave., Evansville 2, Ind.
 Ohmer Co., Geo. H., Box 34, Sta. D, Dayton 10, Ohio.
 Ohmlac Paint & Refining Co., 6550 S. Central Av., Chicago 38, Ill.
 Oil Equipment Laboratories, Inc., 456 Bridge St., Elizabeth, N. J.
 Oil Equipment Mfg. Corp., 169 Derby Ave., New Haven, Conn.
 Oilgas Generating Burners, Inc., 410 S. Jefferson St., New Castle, Pa.
 O'Keefe & Merritt Co., 3700 E. Olympic Blvd., Los Angeles 23, Calif.
 Okun Co., A. L., 109-02 Van Wyck Expwy., So. Ozone Park, N. Y.
 Olsen Mfg. Co., The C. A., Filbert St., Elyria, Ohio.
 Olson & Co., Arthur A., Broad and Court Sts., Canfield, Ohio.
 Oneida Heater Co., Inc., Oneida, N. Y.
 O'Neil-Irwin Mfg. Co., 394 Eighth Ave., Lake City, Minn.
 Oran Co., 2232 S. Third St., Columbus 7, Ohio.
 Original Metal Forming Machine Co., P. O. Box 214, Seattle 11, Wash.
 Ormsby-Osterman Co., 3631 Cass Av., St. Louis 13, Mo.
 Osborn Mfg. Co., 5401 Hamilton Av., Cleveland 14, Ohio.
 Oster Mfg. Co., John, 5055 N. Lydell Ave., Milwaukee 17, Wis.
 O'Sullivan Rubber Corp., Winchester, Va.
 Ould, Ltd., John, 519 S. 5th Ave., Mt. Vernon, N. Y.
 OverHead Heaters, Inc., 1612 Book Bldg., Detroit 26, Mich.
 Overly, Lloyd H., 504 Court St., Maryville, Tenn.
 Overly Mfg. Co., Greensburg, Pa.
 Owens Co., H., 9300 Venice Blvd., Culver City, Calif.
 Owens-Corning Fiberglas Corp., 1930 Nicholas Bldg., Toledo 1, Ohio.
 Ozo Sales Corp., 15 Stiles St., New Haven, Conn.

P

Pabco Products Inc., 475 Brannan St., San Francisco 19, Calif.
 Pace Maker Chimney Co., Chillicothe, Ill.
 Pacific Coast Heater Corp., 330 S. Del Mar Av., San Gabriel, Calif.
 Pacific Gas Heating Co., 2948 Twentieth St., San Francisco 10, Calif.
 Pacific Industrial Mfg. Co., 848 49th Ave., Oakland 1, Calif.
 Pacific Lumber Co., 100 Bush St., San Francisco 4, Calif.
 Pacific States Felt & Mfg. Co., Inc., 845 Howard St., San Francisco, Calif.
 Packard Electric Div., General Motors Corp., Warren, Ohio.
 Packard Mfg. Co., P. O. Box 719, Jacksonville, Fla.
 Packham Crimper Co., Machine Shop, Mechanics-Burgh, O.
 Packless Metal Hose, Inc., 31-42 Winthrop Ave., New Rochelle, N. Y.
 Page Steel & Wire, Div. American Chain & Cable Co., Inc., Monessen, Pa.
 Paine Co., Fullerton & Westgate Rd., Addison, Ill.
 Palmer Excelsior, Inc., 2235 W. McDowell Rd., Phoenix, Ariz.
 Palmer Mfg. Corp., 2200 W. Fillmore, Phoenix, Ariz.
 Palmer Thermometers, Inc., 2501 Norwood Av., Norwood, Cincinnati 12, Ohio.
 Pangborn Corp., 560 Pangborn Blvd., Hagerstown, Md.
 Paragon Elec. Co., 1600 - 12th St., Two Rivers, Wis.
 Paramount Supply Co., 2727 N. 48th St., Lincoln 4, Nebr.

Park City Cornice Works, Inc., 729 Union Av., Bridgeport 7, Conn.
 Parker Appliance Co., 17325 Euclid Av., Cleveland 12, Ohio.
 Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.
 Park Heating Specialties, 6212 Goodrich Ave., Minneapolis 16, Minn.
 Patco Mfg. Co., 231 N. Broad St., Philadelphia, Pa.
 Patrol Valve Co., 2310 Superior Ave., N. E., Cleveland 14, Ohio.
 Patten Co., J. V., 550 DeKalb Av., Sycamore, Ill.
 Paul-Lewis Laboratories, Inc., 4253 N. Port Washington Rd., Milwaukee 12, Wis.
 Payne Beverly Mfg. Co., 9242 Beverly Blvd., Beverly Hills, Calif.
 Payne Di. of Carrier Corp., 700 Royal Oak Dr., Monrovia, Calif.
 Peck, Stow & Wilcox Co., Center St., Southington, Conn.
 Pecora Paint Co., 4th St. & Erie Av., Philadelphia 40, Pa.
 Peden Equipment Co., 4512 Mt. Vernon, Houston, Tex.
 Pedrick Tool & Machine Co., 3640 N. Lawrence St., Philadelphia 40, Pa.
 Peer, Inc., 1440 Milton St., Benton Harbor, Mich.
 Peerless Electric Co., 1401 W. Market St., Warren, Ohio.
 Peerless Furnace and Foundry Co., 1853 Ludlow Av., Indianapolis 7, Ind.
 Peerless of America, Inc., 5830 N. Pulaski Rd., Chicago 30, Ill.
 Peerless Products Div., United Cooling Towers, Inc., 1421 E. Washington, North Little Rock, Ark.
 Penguin Corp., 12334 Stark Rd., Livonia, Mich.
 Penn Boiler & Burner Mfg. Corp., Fruitville Rd., Lancaster, Pa.
 Penn Brass & Copper Co., Erie, Pa.
 Penn Controls, Inc., Goshen, Ind.
 Penn Metal Co., Inc., 205 E. 42nd St., New York 17, N. Y.
 Penn Supply & Metal Corp., 1831 N. Fifth St., Philadelphia 22, Pa.
 Penn Tool Co., 124 E. Cumberland St., Philadelphia 25, Pa.
 Penn Ventilator Co., Goodman Av., Philadelphia 40, Pa.
 Pennsylvania Engineering Corp., 526 S. Jefferson St., New Castle, Pa.
 Pennsylvania Flexible Metallic Tubing Co., 72nd St. & Powers Lane, Philadelphia 42, Pa.
 Pennsylvania Furnace & Iron Co., 313 Pine St., Warren, Pa.
 Pennsylvania Range Boiler Co., 24th & Ellsworth Sts., Philadelphia 46, Pa.
 Pennsylvania Refining Co., Ohio Div., 2686 Lisbon Rd., Cleveland 4, Ohio.
 Pennsylvania Salt Mfg. Co., Three Penn Center Plaza, Philadelphia 2, Pa.
 Pennsylvania Saw Corp., Box 188, Wellesley Hills 82, Mass.
 Pennsylvania Wire Glass Co., 1612 Market St., Philadelphia 3, Pa.
 Perfection Furnace Pipe Co., Toledo 4, Ohio.
 Perfection Industries, Div. of Hupp Corp., 7609 Platt Av., Cleveland 4, Ohio.
 Perflex Corp., 500 W. Oklahoma Av., Milwaukee 7, Wis.
 Perkinson, William J., 412-14 N. Wolcott Av., Chicago 22, Ill.
 Permutit Co., 330 W. 42nd St., New York 36, N. Y.
 Perrygraf Corp., Maywood, Ill.
 Peters-Dalton, Inc., 17900 Ryan Road, Detroit 12, Mich.
 Petersen Mfg. Co., DeWitt, Nebr.
 Petro Div., Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio.
 Petroleum Chemicals, Inc., P. O. Box 969, Fresno, Calif.
 Petroleum Solvent Corp., 331 Madison Av., New York 17, N. Y.
 Pettit & Sons Co., Inc., W. T., 1670 Keefer Rd., Youngstown 4, O.
 Pfanstiehl Chemical Co., 104 Lakeview Av., Waukegan, Ill.
 Phelps Dodge Copper Products Corp., British American Tube Div., 40 Wall St., New York 3, N. Y.
 Phelps Mfg. Co., 801 Thomas St., Little Rock, Ark.
 Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago 50, Ill.
 Philadelphia Chain Block & Mfg. Co., Inc., Hancock & Norris Sts., Philadelphia, Pa.
 Philadelphia Gear Works, Inc., Erie Av. and G St., Philadelphia 34, Pa.
 Philadelphia Thermometer Co., 6th & Cayuga Sts., Philadelphia 40, Pa.
 Philco Corp., Tioga and C Sts., Philadelphia 34, Pa.
 Phillips Cooling Tower Co., Inc., 220 Dupont St., Brooklyn 22, N. Y.
 Phillips Drill Co., U. S. 12 and Liberty Trail, Michigan City, Ind.
 Photoswitch Div., Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass.
 Piatt Products Corp., 1149 S. Pennsylvania Ave., Lansing 4, Mich.
 Pilley Brush Co., S. 33rd, Fort Madison, Iowa.
 Pioneer Furnace Co., 3131 San Fernando Rd., Los Angeles 65, Calif.

Pioneer Sand & Gravel, 901 Fairview, Seattle, Wash.
 Pioneer Tool Co., 908-10th St., Racine, Wis.
 Pioneer Water Heater Corp., 3131 San Fernando Rd., Los Angeles 65, Calif.
 Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa.
 Pittsburgh Furnace Parts Co., 109 Federal St., Pittsburgh, Pa.
 Pittsburgh Lectrodryer Corp., P. O. Box 1766, Pittsburgh 30, Pa.
 Pittsburgh Plate Glass Co., 632 Fort Duquesne Blvd., Pittsburgh 22, Pa.
 Pittsburgh Steel Co., 800 Grant Bldg., Pittsburgh, Pa.
 Pittsburgh Water Heater Co., P. O. Box 4452, Pittsburgh 3, Pa.
 Plasteel Products Corp., McAdam Ave., Washington, Pa.
 Plastergon Wall Board Co., Philadelphia Av., Buffalo 7, N. Y.
 Plastex Corp., 402 Mt. Vernon, Columbus, O.
 Plastic Products Co., 6459 Georgia Av., Detroit 11, Mich.
 Plummer Spray Equipment Co., 700 Filmore St., Napoleon, Ohio.
 Polis Mfg. Co., J. D., 2900-20 W. 26th St., Chicago 23, Ill.
 Pollen Ex., 303 W. Monroe, Chicago, Ill.
 Portable Electric Tools, Inc., 320 W. 83rd St., Chicago 20, Ill.
 Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y.
 Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
 Powder Power Tool Corp., 7526 S. W. Macadam Ave., Portland 1, Ore.
 Power Engineering Co., 205 W. Wacker Dr., Chicago 6, Ill.
 Powers Regulator Co., 3400 Oakton St., Skokie, Ill.
 Powers Wire Products Co., 18190 W. Chicago Blvd., Detroit 28, Mich.
 Prat-Daniel Corp., South Norwalk, Conn.
 Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia 30, Pa.
 Precision Welder Mfg. Co., 660 W. Grand Ave., Chicago, Ill.
 Preferred Utilities Mfg. Corp., 1860 Broadway, New York 23, N. Y.
 Premier Co., 755 Woodlawn Ave., St. Paul 1, Minn.
 Premier Furnace Co., Lock Box 150, Dowagiac, Mich.
 Premium Coal & Oil Co., 5830 Carthage Ave., Cincinnati 12, Ohio.
 Prepro Corp., Edgerton, Wis.
 Prestite Engineering Co., 3900 Chouteau St., St. Louis 10, Mo.
 Price Bros., Flexicore Div., E. Monument Ave., Dayton, Ohio
 Price & Rutzebeck, P. O. Box 30, Hayward, Calif.
 Primor Products, Inc., 2011 W. Beecher Rd., Adrian, Mich.
 Producers & Distributors, Inc., 714 S. 6th St., Allentown, Pa.
 Products Research Co., 3126 Los Feliz Blvd., Los Angeles 39, Calif.
 Profit Products Co., 120 S. LaSalle St., Chicago, Ill.
 Progressive Welder Sales Co., 3070 E. Outer Dr., Detroit 34, Mich.
 Protective Coatings, Inc., P. O. Box 3983, Strathmoor Station, Detroit 27, Mich.
 Proto Tools, 2209 Santa Fe Ave., Los Angeles 58, Calif.
 Pryne & Co., Inc., 140 N. Towne Ave., P. O. Box 698, Pomona, Calif.
 Puhl & Hepper Mfg. Co., Inc., 6400 W. Florissant Av., St. Louis 20, Mo.
 Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.
 Purolator Products, Inc., 970 New Brunswick Ave., Rahway, N. J.
 Pyle-National Co., Multi-Vent Div., 1334 N. Kostner Av., Chicago 51, Ill.
 Pyott Foundry & Machine Co., 328 N. Sangamon St., Chicago 7, Ill.
 Pyramid Mouldings, Inc., 5355 W. Armstrong Av., Chicago 30, Ill.
 Pyrolite Products Co., 1221-31 W. 74th St., Cleveland 2, Ohio.

Q

Quaker State Metals Co., Box 1167, Lancaster, Pa.
 Quality Heating Supply Co., 1632 Race St., Cincinnati, O.
 Quass & Sons, Chas. E., 5018 Yukon St., N. W., Canton 8, O.
 Queen Stove Works, Inc., 505 Front St., Albert Lea, Minn.
 Quickdraft Co., DuCher-Hampden Bldg., P. O. Box 87, Canton, O.
 Quick Furnace & Supply Co., 213 Court Av., Des Moines 9, Iowa.
 Quiet Automatic Burner Corp., 33-35 Bloomfield Ave., Newark 4, N. J.
 Quiet-Heat Mfg. Corp., Subsidiary of Emerson Radio and Phonograph Corp., 46 Oliver St., Newark 5, N. J.
 Quigley Co., Inc., 527 Fifth Av., New York 17, N. Y.
 Quincy Stove Mfg. Co., 825 S. Front St., Quincy, Ill.

R

R. B. Enterprises, Inc., 2284 Maxwell, Detroit 14, Mich.
 RCS Tool Corp., 220 N. Broadway, Joliet, Ill.

R-S Products Corp., 4600 Germantown Ave., Philadelphia 44, Pa.
 Racine Hydraulics & Machinery, Inc., 2000 Albert St., Racine, Wis.
 Radex Corp., 2076 Elston Ave., Chicago, Ill.
 Radiant-Aire Corp., Arthur St., Box 131, Michigan City, Ind.
 Radiant Burners, Inc., 310 S. Main St., Lombard, Ill.
 Radiant Utilities Corp., 8817 18th Ave., Brooklyn, N. Y.
 Radiation Furnace Corp., Benton Harbor, Mich.
 Radiator Specialty Co., 1700-1900 Dowd Rd., Charlotte 1, N. C.
 Radio Corp. of America, Front & Cooper Sts., Camden, N. J.
 Ralph Mfg. Co., Inc., P. O. Box 188, Wadsworth, Ohio.
 Ramset Fastening System, Winchester-Western Div., Olin Mathieson Chemical Corp., 12117 Berea Rd., Cleveland 11, O.
 Ramtite Co., Div. S. Obermayer Corp., 2563 W. 18th St., Chicago 8, Ill.
 Ran Appliance Corp., D. P. 1202 N. Alameda, Compton, Calif.
 Ranco Inc., 601 W. 5th Ave., Columbus 1, Ohio.
 Randall Graphite Bearings, Inc., Greenlawn & Lake Sts., Lima, Ohio.
 Ransome Co., 4030 Hollis St., Emeryville 8, Calif.
 Rapidesign, Inc., P. O. Box 592, Glendale, Calif.
 Rasch Mfg. Corp., 1630-48 Oakland Ave., Kansas City 3, Mo.
 Rawlplug Co., Inc., The, 271 Church St., New York 13, N. Y.
 Raybestos-Manhattan, Inc., 61 Willett St., Passaic, N. J.
 Rayfield-Staffco Burner Co., 2066 Canalport, Chicago 8, Ill.
 Ray Oil Burner Co., 1301 San Jose Av., San Francisco 12, Calif.
 Raytheon Mfg. Co., Waltham 54, Mass.
 Reading Crane & Hoist Corp., 2100 Adams St., Reading, Pa.
 Redmond Distributors, Inc., Owosso, Mich.
 Red Spot Electric Co., 7405 S. Tacoma Way, Tacoma 9, Wash.
 Red Wing Oil Burner Co., Inc., 12 Forest St., Medford 55, Mass.
 Reed Equipment Div., The Webb Corp., Box 549, Webb City, Mo.
 Reed Unit-Fans, Inc., 1001 St. Charles Av., New Orleans 8, La.
 Rees Blow Pipe Mfg. Co., 2929 Fifth St., Berkeley 10, Calif.
 Reeves Steel & Mfg. Co., Lock Box 107, Dover, Ohio.
 Reflectal Corp., Subsidiary Borg-Warner Corp., 310 S. Michigan Ave., Chicago 4, Ill.
 Refractory & Insulation Corp., 120 Wall St., New York 3, N. Y.
 Refrigeration Appliances, Inc., 903 Lake St., Chicago 7, Ill.
 Refrigeration Economics Co., Inc., 1231 Tuscarawas St., E., Canton 2, Ohio.
 Refrigeration Engineering, Inc., 7250 E. Slauson Ave., Los Angeles 22, Calif.
 Rega Mfg. Co., 79 Mt. Hope Av., Rochester 20, N. Y.
 Register & Grille Mfg. Co., Inc., 70 Berry St., Brooklyn 11, N. Y.
 Rehm, R., 112 208th St., St. Albans 11, N. Y.
 Reichert Float & Mfg. Co., 2242 Smead Av., Toledo 6, Ohio.
 Reif-Rexoil, Inc., 37-41 Carroll St., Buffalo 3, N. Y.
 Reilly Tar & Chemical Corp., 1615 Merchants Bank Bldg., Indianapolis 4, Ind.
 Reiner & Campbell Co., Inc., 19 Euclid Ave. at Lockwood St., Box 5035, Newark 5, N. J.
 Reitman Mfg. Co., 10319 Pearlmain, Oakland, Calif.
 Reliable Gas Products Co., 221 Third St., N. E., Cedar Rapids, Iowa.
 Reliance Automatic Lighting Co., 1929 Mead St., Racine, Wis.
 Reliance Electric & Engineering Co., 1058 Ivanhoe Rd., Cleveland, 10, Ohio.
 Reliance Refrigerating Machine Co., 3401 N. Kedzie Ave., Chicago, Ill.
 Reliance Regulator Div., American Meter Co., Inc., 1000 Meridian Ave., Alhambra, Calif.
 Remco, Inc., Zelienople, Pa.
 Remington Air Conditioning Div., Remington Corp., Auburn, N. Y.
 Remington Arms Co., Inc., 939 Barnum Ave., Bridgeport 2, Conn.
 Rempe Co., 340 N. Sacramento Ave., Chicago 12, Ill.
 Replacement Parts, Inc., 22408 Lake Shore Blvd., Euclid 23, O.
 Republic Heater Corp., 2231 Randolph St., Huntington Park, Calif.
 Republic Products Co., 7420 State Rd., Philadelphia 36, Pa.
 Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown 1, Ohio.
 Republic Steel Corp., Republic Bldg., Cleveland 1, Ohio.
 Research Products Corp., 1015 E. Washington Av., Madison 10, Wis.
 Resolite Corp., Zelienople, Pa.
 Reuland Electric Co., Alhambra, Calif.
 Revcor, Carpentersville, Ill.
 Reverse Copper and Brass, Inc., 230 Park Av., New York 17, N. Y.
 Revere Products, Inc., 9145 E. Forest Av., Detroit 13, Mich.
 Rex Metal-Craft, Inc., 1718 Gent St., Indianapolis, Ind.
 Rex Roto Corp., 14414 Dexter Blvd., Detroit 6, Mich.
 Rex Welder Co., 409 Southwest Blvd., Kansas City 8, Mo.
 Reynolds Electric Co., 3000 River Rd., River Grove, Ill.

Reynolds Gas Regulator Co., 1416 Lincoln St., Anderson, Ind.
 Reynolds Mfg. Co., Springfield 2, Mo.
 Reynolds Metals Co., P. O. Box 2158, Louisville 1, Ky.
 Reznor Mfg. Co., Mercer, Pa.
 Rheem Mfg. Co., 7600 S. Kedzie Ave., Chicago 29, Ill.
 Rhodes, Inc., M. H., 30 Bartholomew Av., Hartford 6, Conn.
 Richards-Wilcox Mfg. Co., 275 Third St., Aurora, Ill.
 Rich Fan Mfg. Co., Phil, 2900 Caroline St., Houston 4, Tex.
 Richkraft Co., The, 510 N. Dearborn St., Chicago 10, Ill.
 Richmond Radiator Co., Affil. Reynolds Metals Co., Box 111, Metuchen, N. J.
 Riffin Metal Products, Box 267, Kankakee, Ill.
 Rigidbilt, Inc., 2850 W. Fulton St., Chicago 12, Ill.
 Rigidized Metals Corp., 699-P Ohio St., Buffalo 3, N. Y.
 Rinehart Inc., Richmond, Ind.
 Rival Strap Corp., 308 W. 20th St., New York 11, N. Y.
 Riverside Boiler & Engineering Co., Inc., 2705 Industrial Dr., Ft. Worth, Tex.
 Riverton Lime & Stone Co., Inc., Riverton, Va.
 Robbins & Myers, Inc., 1345 Lagonda Av., Springfield 99, Ohio.
 Robert Mfg. Co., 9035 Venice Blvd., Los Angeles 34, Calif.
 Roberts-Gordon Appliance Co., 44 Central Ave., Buffalo 6, N. Y.
 Robertshaw Thermostat Div., Robertshaw-Fulton Controls Co., Youngwood, Pa.
 Robertson, F. L., 36 Rano St., Buffalo, N. Y.
 Robertson Co., H. H., 2400 Farmers Bank Bldg., Pittsburgh 22, Pa.
 Robinson Aviation, Inc., Teterboro, N. J.
 Robinson Insulation Co., P. O. Box 1419, Great Falls, Mont.
 Robinson Ventilating Co., Zelenople, Pa.
 Robot Auto-Heat Corp., Newfield St., Middletown, Conn.
 Rochester Mfg. Co., Inc., 66 Rockwood St., Rochester 10, N. Y.
 Rockford Brass Works, 700 S. Main St., Rockford, Ill.
 Rockford Screw Products Co., 2501 Ninth St., Rockford, Ill.
 Rock Island Register Co., 2435 Fifth Av., Rock Island, Ill.
 Rockwell Co., W. S., 2546 Eliot St., Fairfield, Conn.
 Rockwell Mfg. Co., Meter and Valve Div., 400 N. Lexington Ave., Pittsburgh 8, Pa.
 Roessing Mfg. Co., 1616 Noble St., Sharpsburg, Pittsburgh 15, Pa.
 Rohm & Haas Co., 222 W. Washington St., Philadelphia, Pa.
 Rolliton of America, Inc., 714 E. Van Buren St., Phoenix, Ariz.
 Rolled Steel Products Div., Emergency Steel Service Corp., 7415 St. Louis Ave., Skokie, Ill.
 Rome-Turney Radiator Co., Canal St., Rome, N. Y.
 Ronci Machine Co., Inc., F., 2 Atlantic Blvd., Centredale 11, R. I.
 Roofing & Supply Co., 1409-15 Fort St., Chattanooga, Tenn.
 Roper Corp., Geo. D., Blackhawk Park Av., Rockford, Ill.
 Rosebraugh Co., W. W., 680 S. 17th St., Salem, Ore.
 Rosedale Foundry & Machine Co., Columbus & Preble Ave., N. S. Pittsburgh 12, Pa.
 Rose Mfg. Co., 2700 W. Barbary Pl., Denver 4, Colo.
 Ross Machine Tool Co., P. O. Box 122, Chicago Ridge, Ill.
 Ross Mfg. Co., 413 Fairview Ave., N. Seattle Wash.
 Ross Sprinkler Co., 4333 Temple City Blvd., Rosemead, Calif.
 Rotary Concrete Drill Co., 650 S. Arroyo Parkway, Pasadena 2, Calif.
 Rotex Punch Co., Inc., 2350 Alvarado St., San Leandro, Calif.
 RotoMetals, 980 Harrison St., San Francisco 7, Calif.
 Rotor Corp., P. O. Box 42, Far Hills Br., Dayton 9, Ohio
 Rotor Tool Co., 26300 Lakeland Blvd., Cleveland 32, Ohio
 Round Oak Co., Inc., Dowagiac, Mich.
 Round Tube and Cores Co., 806 N. Peoria St., Chicago 22, Ill.
 Royal-Apex Mfg. Co., Inc., 1389-97 Atlantic Ave., Brooklyn 16, N. Y.
 Royal Jet, Inc., 1024 Westminster Av., Alhambra, Calif.
 Royersford Foundry & Machine Co., 35 Main St., Royersford, Pa.
 Royson Engineering, Hathoro, Pa.
 Rubber and Asbestos Corp., 225 Belleville Ave., Bloomfield, N. J.
 Ruberoid Co., 500 Fifth Av., New York 36, N. Y.
 Ruby Chemical Co., 74 McDowell St., Columbus 16, Ohio.
 Ruemelin Mfg. Co., 3860 N. Palmer St., Milwaukee 12, Wis.
 Russell, Birdsell & Ward Bolt & Nut Co., Port Chester, N. Y.
 Russell Co., F. C., 1100 Chester Ave., Cleveland 1, Ohio.
 Rust-Oleum Corp., 2425 Oakton St., Evanston, Ill.
 Ruthman Machinery Co., 1809 Reading St., Cincinnati 2, O.
 Rutland Fire Clay Co., 91 Curtis Av., Rutland, Vt.
 Ruud Mfg. Co., 2025 Factory St., Kalamazoo, Mich.
 Rybolt Heater Co., 615 Miller St., Ashland, Ohio.
 Ryerson & Son, Inc., Joseph T., 2558 W. 16th St., Chicago 80, Ill.
 Ryniker Steel Products Co., 11-19 N. 25th St., Billings, Mont.

S

S & C Mfg. Co., 6245 Wiehe Rd., Cincinnati, O.
 S-K Co., Inc., Admiral Wilson Blvd., Camden, N. J.

SKF Industries, Inc., Front St. and Erie Av., Philadelphia 32, Pa.
 S.O.S. Products Co., Inc., 346 Cumberland St., Brooklyn 38, N. Y.
 Safety Nail Driver Corp., 70 Rosalie Ave., Clifton, N. J.
 Saffell Air Conditioning Co., 5800 S. Central, Phoenix, Ariz.
 Saginaw Salt Products Co., 3000 Carrollton Rd., Saginaw 35, Mich.
 St. Charles Mfg. Co., St. Charles, Ill.
 St. Clair Foundry Corp., Beech & Wilson Sts., Centralia, Ill.
 St. Clair Metal Products Co., 6700 Central Ave., Cleveland, O.
 St. Clair Rubber Co., Marysville, Mich.
 St. Louis Tool Co., 6100 Prescott St., St. Louis 13, Mo.
 Sall Mountain Co., Box 777, Hamilton, Ohio.
 Sampson Chemical and Pigment Corp., 2830 W. Lake St., Chicago 12, Ill.
 Samuel Stamping & Enameling Co., Manufacturers Rd., Chattanooga, Tenn.
 San Angelo Foundry & Machine Co., Box 1587, 1000 Upton St., San Angelo, Texas.
 San Carlos Mfg. Co., 850 E. San Carlos Ave., San Carlos, Calif.
 Sandberg Mfg. Co., 3850 N. W. Yeon Av., Portland 10, Ore.
 Sandee Mfg. Co., 3050 W. Foster Ave., Chicago, Ill.
 Sanders, J. A., Box 123, Fulton, N. Y.
 Sands Mfg. Co., 5407 Sweeney, Cleveland, O.
 Sangamo Electric Co., 1301 N. 11th St., Springfield, Ill.
 Santa Fe Tank and Tower Co., Inc., 5401 S. Boyle Ave., Los Angeles 38, Calif.
 Saran Lined Pipe Co., 2415 Burdette Ave., Ferndale 20, Mich.
 Sarco Co., Inc., Empire State Bldg., New York 1, N. Y.
 Sarcotherm Controls, Inc., Empire State Bldg., New York 1, N. Y.
 Sargent EnginAiring Co., 1375 E. 45th St., Cleveland, O.
 Sauereisen Cements Co., 1045 N. Canal St., Pittsburgh 15, Pa.
 Savage Co., W. J., 912 W. Clinch Av., Knoxville 16, Tenn.
 Saw-Mor Tool & Blade Co., 520 Machinery Hall Bldg., Chicago 6, Ill.
 Scaife Co., Oakmont, Pittsburgh District, Pa.
 Schaefer Brush Mfg. Co., 115-117 W. Walker, Milwaukee 4, Wis.
 Schecter Bros. Co., N. W. Cor. Hancock & Huntington Sts., Philadelphia 33, Pa.
 Schill Mfg. Co., 302 Mansfield St., Crestline, Ohio.
 Schnacke, Inc., 1101 N. Governor St., Evansville, Ind.
 Schutte and Koerting Co., Cornwells Heights, Bucks County, Pa.
 Schwab Furnace Co., 332 W. Florida St., Milwaukee 4, Wis.
 Schwab Safe Co., East Maine and Boulevard, Lafayette, Ind.
 Schwitzer-Cummins Co., 1125 Massachusetts Ave., Indianapolis 7, Ind.
 Sciaky Bros., Inc., 4915 W. 67th St., Chicago 38, Ill.
 Scotco Products Co., Beverly, Mass.
 Scott, Inc., Herman Hosmer, 385 Putnam Ave., Cambridge 39, Mass.
 Screw Machine Products, Irwin, Pa.
 Scully Signal Co., 174 Green St., Melrose, Mass.
 Seamlex Co., Inc., 41-23 24th St., Long Island City 1, N. Y.
 Seco-Lite Mfg. Co., 4916 Easton Av., St. Louis 13, Mo.
 Security Valves Corp., 541 W. Garfield, Glendale, Calif.
 Seelye Craftsmen, The., 984 Central Ave., Minneapolis, Minn.
 Seiberling Rubber Co., Plastics Div., Newcomerstown, O.
 Sequoia Mfg. Co., 1000 Brittan Av., San Carlos, Calif.
 Servel, Inc., 119 Morton Av., Evansville 20, Ind.
 Service Machine Co., Inc., 466 Miller St., Elizabeth 4, N. J.
 Set Screw & Mfg. Co., 111 Main St., Bartlett, Ill.
 Severson Mfg. & Supply Co., 1034 W. Somers St., Milwaukee 5, Wis.
 Shafer Bearing Div., Chain Belt Co., 801 Burlington Ave., Downers Grove, Ill.
 Shakeproof Div., Illinois Tool Wks., 2501 N. Keeler Av., Chicago 39, Ill.
 Shallcross Controls, Inc., 2217-21 N. 31st St., Milwaukee 8, Wis.
 Shana Mfg., Inc., 188 W. Randolph St., Chicago 1, Ill.
 Sharon Steel Corp., Drawer 537, Sharon, Pa.
 Sheet Metal Mfg. Co., 6400 Southern Blvd., Youngstown 12, O.
 Sheet Metal Mfg. Co., Inc., 953 Myrtle Av., Brooklyn 6, N. Y.
 Sheet Metal Specialty Div., Follansbee Steel Corp., P. O. Box 567, Follansbee, W. Va.
 Shell Oil Co., 50 W. 50th St., New York 20, N. Y.
 Shepard Niles Crane & Hoist Corp., 410 Schuyler Av., Montour Falls, N. Y.
 Sheridan-Gray, Inc., 24701 Crenshaw Blvd., Torrance, Calif.
 Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland 1, Ohio.
 Siebring Mfg. Co., George, Iowa.
 Simon Mfg. Co., Grandview, Mo.
 Sight Feed Generator Co., P. O. Box 38, West Alexandria, Ohio.
 Signal Electric Div., King-Seeley Corp., 1821 - 13th St., Menominee, Mich.

Silent Glow Oil Burner Co., 850 Windsor St., Hartford, Conn.
 Silent Sioux Corp., Orange City, Iowa.
 Silvercote Products, Inc., 161 E. Erie St., Chicago 11, Ill.
 Silvercraft, Inc., 120 S. Floyd, Louisville, Ky.
 Simmons Heating Supply Co., Boro and Primos Aves., Primos, Pa.
 Simonds Saw & Steel Co., 470 Main St., Fitchburg, Mass.
 Simplex Mfg. Co., 200 N. Main St., Fond du Lac, Wis.
 Simplex Oil Heating Corp., 7901 Oxford Av., Philadelphia 11, Pa.
 Simpson Co., 1060 E. 11th St., Oakland 6, Calif.
 Sioux Steel Co., Sioux Falls, S. Dak.
 Sipe & Co., James B., 118 Vanadium Rd., Pittsburgh 16, Pa.
 Skilbeck Mfg. Co., 7432 27th Av., Kenosha, Wis.
 Skil Corp., 3033 Elston Av., Chicago 30, Ill.
 Skinner Electric Valve Div., The Skinner Chuck Co., 95 Edgewood Ave., New Britain, Conn.
 Skinner Heating & Ventilating Co., Div. St. Louis Blow Pipe & Heater Co., Inc., 1954 N. 9th St., St. Louis 6, Mo.
 Skuttle Mfg. Co., Milford, Mich.
 Slip-On, Inc., 401 Broadway, New York 13, N. Y.
 Sly Mfg. Co., W. W., 4736 Train Av., Cleveland 2, Ohio.
 Small Motors, Inc., 2076 Elston Av., Chicago 14, Ill.
 Smith Co., J. B., 3327 B St., Philadelphia 34, Pa.
 Smith Corp., A. O., Permaglas Div., Kankakee, Ill.
 Smith Filter Corp., 2nd Av., Moline, Ill.
 Smith Heater Co., Peter, 120 Mt. Elliott Ave., Detroit, Mich.
 Smith, R. E., 1122-30 Elizabeth, P. O. Box 78, Waukegan, Ill.
 Smith Welding Equipment Corp., 2633 Fourth St., S. E., Minneapolis 14, Minn.
 Smooth-on Mfg. Co., 568-574 Communipaw Av., Jersey City 4, N. J.
 Snap-On Mfg. Co., 1028 Blue Island Av., Chicago, Ill.
 Snap-on Tools Corp., Kenosha, Wis.
 Snappy Inc., 620 W. Main St., Detroit Lakes, Minn.
 Solar Aircraft Co., San Diego 12, Calif.
 Somers, Inc., H. J., 6063 Wabash Av., Detroit 8, Mich.
 Sonneborn Sons, Inc., L., 404 Fourth Ave., New York 16, N. Y.
 Sonner Burner Co., 412-420 E. 6th Ave., Winfield, Kans.
 Sonoco Products Co., Construction Products Div., Hartsville, S. C.
 Soreng Mfg. Co., 9551 Soreng Ave., Schiller Park, Ill.
 Soss Mfg. Co., 21777 Hoover Rd., Detroit 13, Mich.
 South Bend Air Products, Inc., 322 E. Colfax, South Bend 22, Ind.
 Southbridge Roofing Co., Inc., Dudley Road, Southbridge, Mass.
 Southco Div., South Chester Corp., Lester, Pa.
 Souther Iron Co., E. E., 1952 Kienlen Av., St. Louis 20, Mo.
 Southern Heater Corp., Compton, Calif.
 Southern Mist Products Co., 945 Pitner Ave., Evanston, Ill.
 Southern States Iron Roofing Co., Stiles Av. & Louisville Rd., Savannah, Ga.
 Southport Paint Co., Div. Wesson Oil & Snowdrift Co., Inc., Savannah, Ga.
 Southwestern Heater Corp., 309 Browder St., Dallas, Texas.
 Southwest Mfg. Co., Box 151, Aurora, Mo.
 Sparkler Mfg. Co., Mundelein, Ill.
 Spear Stove & Heater Co., James, 1000 Diamond St., Philadelphia 22, Pa.
 Speco, Inc., 7308 Associate Ave., Cleveland 9, Ohio.
 Speed Metals, Inc., 2500 N. Main, Rockford, Ill.
 Speed-Seam Co., 820 Wolcott Ave., Chicago 22, Ill.
 Speedway Mfg. Co., Div. of Thor Power Tool Co., 1834 S. Laramie St., Chicago, Ill.
 Spencer Thermostat Div., Metals & Controls Corp., 34 Forest St., Attleboro, Mass.
 Spencer Turbine Co., 484 New Park Av., Hartford 6, Conn.
 Sperry & Co., D. R. Batavia, Ill.
 Sperti Paraday, Inc., Cooper Hewitt Div., 1077 Celestial St., Cincinnati 2, O.
 Spincraft, Inc., 4132 W. State St., Milwaukee, Wis.
 Sporian Valve Co., 7525 Sussex Av., St. Louis 17, Mo.
 Spotweld Co., 3762 Ridge Rd., Cleveland, Ohio.
 Spray Engineering Co., 114 Central St., Somerville 45, Mass.
 Spraying Systems Co., 3201 Randolph St., Bellwood, Ill.
 Spravo-Flake Co., 2715 Irving Park Blvd., Chicago 18, Ill.
 Sprayon Products, Inc., 2075 E. 65th, Cleveland, O.
 Spun Steel Div., Automatic Steel Products, Inc., 1201 Camden Av., S. W., Canton 6, Ohio.
 Square D Co., 6060 Rivard St., Detroit 11, Mich.
 Square D Co., Industrial Controller Div., 4041 N. Richards St., Milwaukee 12, Wis.
 Stahl Metal Products, 3490 W. 140, Cleveland, O.
 Stamco Inc., New Bremen, Ohio.
 Stanat Mfg. Co., Inc., 47-34 37th St., Long Island City 1, N. Y.
 Standard Arcoil Corp., 21-23 Broad St., Newark 4, N. J.
 Standard Asbestos Mfg. Co., 860 W. Evergreen Ave., Chicago 22, Ill.
 Standard Electric Mfg. Co., Inc., West Berlin, N. J.
 Standard Fuel Engine Co., 667 Post Av., S., Detroit 17, Mich.
 Standard Furnace Supply Co., Ltd., 714 S. 72nd St., P. O. Box 1312, Omaha, Nebr.
 Standard Heating Equipment Co., 1406 E. Fourth St., Waterloo, Iowa.
 Standard Power Groove Machine Corp., 23 Leonard, New York 13, N. Y.
 Standard Refrigeration Co., 3535 Fillmore St., Chicago 24, Ill.
 Standard Rolling Mills, Div. of Revere Copper and Brass, Inc., 196 Diamond St., Brooklyn 22, N. Y.
 Standard Stamping & Perforating Co., 3137 W. 49th Pl., Chicago, Ill.
 Stanley Electric Tools Div., The Stanley Works, 480 Myrtle St., New Britain, Conn.
 Stanthony Corp., 5341 San Fernando Rd., W., Los Angeles 39, Calif.
 Star Expansion Bolt Co., 142 Liberty St., New York 6, N. Y.
 Stark & Co., H. W., 5668 Geddes Rd., Ann Arbor, Mich.
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Av., Bloomfield, N. J.
 Star Stainless Screw Co., 195 Union Ave., Paterson, N. J.
 Stearns Co., N. C., P. O. Box 1234, Shreveport, La.
 Steel City Furnace Co., Springdale, Pa.
 Steelcraft Mfg. Co., 9017 Blue Ash Rd., Rossmoyne, O.
 Steele Mfg. Co., 445 Winchester Ave., Ashland, Ky.
 Steel Products Engineering Co., Combustioneer Div., 1205 W. Columbia St., Springfield, Ohio.
 Steel Sales Corp., 3348 S. Pulaski Rd., Chicago, Ill.
 Steel & Tubes Div., Republic Steel Corp., 216 E. 131st St., Cleveland 8, Ohio.
 Stefcro Steel Co., 41 Roeske Av., Michigan City, Ind.
 Steffens-Amberg Co., 262 Morris Av., Newark 3, N. J.
 Steinen Mfg. Co., Wm., 43 Bruen St., Newark, N. J.
 Stephens-Adamson Mfg. Co., Ridgeway Av., Aurora, Ill.
 Sterlairo, Inc., 265 N. Elm St., Westfield, Mass.
 Sterling Air Conditioning Corp., 354 W. Main Ave., Gastonia, N. C.
 Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif.
 Sterling Foundry Co., P. O. Box 457, Sterling, Ill.
 Stewart Industries, Inc., 10 Colfax Ave., Clifton, N. J.
 Stewart Industries, Inc., 320 E. St. Joseph St., Indianapolis 2, Ind.
 Stewart Mfg. Co., Grove Ave., Cedar Grove, N. J.
 Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill.
 Stewart-Warner Corp., U. S. Machine Div., Lebanon, Ind.
 Stic-Klip Mfg. Co., Inc., 50 Regent St., Cambridge 40, Mass.
 Stoddard Industries, Inc., 1545 Kingsbury St., Chicago 22, Ill.
 Stokar-Ola Mfg. Co., 2400 S. Adams St., Peoria, Ill.
 Stortz & Son, Inc., John, 210 Vine St., Philadelphia 6, Pa.
 Stossel & Sons Co., Carl, Front Royal, Va.
 Stow Mfg. Co., 445 State St., Binghamton, N. Y.
 Straitsville Brick Co., New Straitsville, O.
 Stratton & Terstegge Co., 1501 W. Main St., Louisville 1, Ky.
 Stueck, Inc., W. Whitney, Old Saybrook, Conn.
 Sub-Zero Freezer Co., Inc., Route 3, Box 2017, Madison, Wis.
 Sudbury Laboratory, South Sudbury, Mass.
 Sullivan Valve & Engineering Co., P. O. Box 1931, Butte, Mont.
 Sundrella Mfg. Co., 5202 N. 22nd Ave., Phoenix, Ariz.
 Sundstrand Engineering Co., 1525 Seventh St., Rockford, Ill.
 Sundstrand Hydraulic Div., 2210 Harrison Ave., Rockford, Ill.
 Sundstrom Pressed Steel, 8030 S. Chicago Ave., Chicago, Ill.
 Sun-Fire Stoker Corp., 802 E. Eighth St., New Albany, Ind.
 Sunny Sue Burner Co., 117 Bertram Pl., Syracuse, N. Y.
 Sun-Ray Burner Mfg. Corp., 139-24 Queens Blvd., Jamaica 2, N. Y.
 Sun Steel Co., 1702 W. 74th Pl., Chicago 36, Ill.
 Sunwarm, Inc., P. O. Box 263, Kingsport, Tenn.
 Superbo Mfg. Co., 4090 N. Mission Rd., Los Angeles 33, Calif.
 Superior Flux & Mfg. Co., 1302 Ontario St., Cleveland 13, Ohio.
 Superior Furnace & Mfg. Co., 322 Hamilton, Plymouth, Mich.
 Superior Mfg. Co., Inc., 203 N. Pennsylvania Ave., Alexandria, Ind.
 Superior Metal Fabricating Co., Pleasant Ave., Niles, Ohio.
 Superior Pneumatic & Mfg., Inc., 4758 Warner Rd., Cleveland 25, Ohio.
 Superior Products Co., 606 S. 14th St., Omaha 2, Nebr.
 Superior Safety Furnace Pipe Co., 5820 Forsythe Av., Detroit 2, Mich.
 Superior Valve and Fittings Co., 1509 W. Liberty Ave., Pittsburgh 26, Pa.
 Super Radiator Corp., 6714 Walker St., Minneapolis 16, Minn.
 Supreme Electric Products Corp., 194 Vassar St., Rochester 7, N. Y.
 Sure Comfort Furnace Co., 900 S. Des Plaines Ave., Forest Park, Ill.
 Surface Combustion Corp., 2375 Dorr St., Toledo 1, Ohio.

Sutton Corp., O. A., 1812 W. Second St., Wichita 2, Kans.
 Swaine Mfg. Co., Fred J., 1300 N. Seventh St., St. Louis 6, Mo.
 Swartwout Co., 18511 Euclid Av., Cleveland 12, Ohio.
 Swirling Oil Burner Mfg. Corp., 105-20 New York Blvd., Jamaica 33, N. Y.
 Synchronous Flame, Inc., Walworth, Wis.
 Syncromatic Corp., 1141 Tenth St., Watertown, Wis.
 Syntrol Co., 275 Lexington, Homer City, Pa.

T

TOT Towers, Inc., 5220 Lawndale, Houston, Tex.
 Tamms Industries, Inc., 228 N. LaSalle St., Chicago 1, Ill.
 Tannwitz Works, 315 Front Av., N. W., Grand Rapids 2, Mich.
 Taylor Instrument Companies, 95 Ames St., Rochester 1, N. Y.
 Taylor-Winfield Corp., 1052 Mahoning Av., N. W., Warren, Ohio.
 Techniflex Corp., Port Jervis, N. Y.
 Tech-Tron Corp., 2205 Haskell Ave., Lawrence, Kans.
 Tecumseh Products Co., Tecumseh, Mich.
 Telechron, Inc., Ashland, Mass.
 Temco, Inc., 4104 Park Av., Nashville 9, Tenn.
 Tempo Products, 2075 E. 65th St., Cleveland, O.
 Temprite Products Corp., East Maple Rd., Birmingham, Mich.
 Tennessee Coal & Iron Div., U. S. Steel Corp., Box 599, Fairfield, Ala.
 Tennessee Fabricating Co., 1490 Grimes, Memphis 6, Tenn.
 Tennessee Products & Chemical Corp., American Natl. Bank Bldg., Nashville 3, Tenn.
 Tenney Engineering Inc., 1090 Springfield Rd., Union, N. J.
 Termite Drills, Inc., 99 N. Lotus St., Pasadena 8, Calif.
 Tesco, Inc., 1403 E. 5th Court, Tulsa 20, Okla.
 Thatcher Furnace Co., Centre St., Garwood, N. J.
 Thermac Co., 800 E. 108th St., Los Angeles 59, Calif.
 Thermal Agency, 1515 Dallas, Houston, Tex.
 Thermco Laboratories, Johnson Road, Michigan City, Ind.
 Thermex Engineering Co., 400 N. Oakley Blvd., Chicago 12, Ill.
 Therm-O-Blast Div., O'Halloran Inds., 12317 Turner Ave., Detroit 4, Mich.
 Therm-O-Disc, Inc., 127 Crouse St., Mansfield, O.
 Thermod Co., Whitehead Rd., Trenton 6, N. J.
 Therm Oil Burner Co., 2105 Westlake Ave., Seattle 1, Wash.
 Thermo-Products, Inc., North Judson, Ind.
 Therm-O-Wheel, Inc., 1040 B 22 St., Far Rockaway 91, N. Y.
 Thomas Industries, Inc., Electric Sprayit Div., 1415 Illinois Ave., Sheboygan, Wis.
 Thompson Mfg. Co., A. F., 1040 Vernon St., Huntington, W. Va.
 Thompson & Co., 1085 Allegheny Av., Oakmont, Pa.
 Thompson Products, 23555 Euclid Ave., Cleveland, O.
 Thompson & Sons, Inc., 8130 W. 47th St., Lyons, Ill.
 Thomson Electric Welder Co., 161 Pleasant St., Lynn, Mass.
 Thor Metal Products Co., Inc., Box 118, Eastwood Station, Syracuse 6, N. Y.
 Thor Power Tool Co., Aurora, Ill.
 Thor Tool & Die Co., 865 Estabrook St., San Leandro, Calif.
 Tierney Rotor Ventilator Co., 239 4th Ave., S., Minneapolis, Minn.
 Tiffin Art Metal Co., Box 807, Tiffin, Ohio.
 Time Saver Tools, Inc., Mundelein, Ill.
 Timken Roller Bearing Co., The, 1835 Dueber Ave., S. W., Canton 6, Ohio.
 Timken Silent Automatic Div., Rockwell Spring and Axle Co., Jackson, Mich.
 Tinit Mfg. Co., Inc., 1635-39 Platte St., Denver 2, Colo.
 Tinnerman Products, Inc., Department No. 16, P. O. Box 6688, Cleveland 1, Ohio.
 Titan Valve & Mfg. Co., 9913 Elk Av., Cleveland, Ohio.
 Titeflex, Inc., 500 Frelinghuysen Ave., Newark 5, N. J.
 Titus Mfg. Corp., Box 810, Highway 20 West, Waterloo, Iowa.
 Tjernlund Mfg. Co., 2140 Kasota St., St. Paul 14, Minn.
 Toledo Heater Co., 25 S. St., Clair St., Toledo 4, Ohio.
 Tool Industries, Inc., 15438 Telegraph Rd., Detroit, Mich.
 Topflight Corp., 160 E. 9th Ave., York, Pa.
 Toridheet Div., Cleveland Steel Products Corp., 16025 Brookpark Rd., Cleveland 11, O.
 Torit Mfg. Co., 292 Walnut St., St. Paul 2, Minn.
 Tork Clock Co., Inc., 1 Grove St., Mt. Vernon, N. Y.
 Torq Electric Corp., 1002 Interstate St., Bedford, Ohio.
 Torrington Mfg. Co., Torrington, Conn.
 Toungeate & Coats, P. O. Box 241, Austin, Tex.
 Townsend Co., 206 River Rd., New Brighton, Pa.
 Trade-Wind Motorfans, Inc., 7755 Paramount Blvd., Rivera, Calif.

Trageser Copper Works, Inc., Maspeth, L. I., N. Y.
 Trane Co., The, LaCrosse, Wis.
 Tremont Nail Co., Box 111, Wareham, Mass.
 Triad Products Corp., 5121 N. Clark St., Chicago 40, Ill.
 Tri-a-lium Products Co., 7429 W. Carmen Ave., Chicago 31, Ill.
 Triangle Mfg. Co., 338 Division St., Oshkosh, Wis.
 Trimedge of Ga., Inc., 78 Fair St., Newnan, Ga.
 Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill.
 Trion, Inc., 1000 Island Ave., McKees Rocks, Pa.
 Tri-Saw Corp., 2207 Hanley Industrial Court, St. Louis, Mo.
 Tri-State Heating Supply Inc., 234-236 Murray St., Port Wayne 5, Ind.
 Tropic-Air Stoker Co., Box 236, Station A, Canton 3, Ohio.
 Tropical Paint Co., 1244-86 W. 70th St., Cleveland, Ohio.
 Trufo Fan Co., 523 Main St., Harmony, Pa.
 Tru-Heat Co., 532 Miller Ave., Trenton 10, N. J.
 Tru-Mac Mfg. Co., 24 Woburn St., Reading, Mass.
 Truscon Laboratories, Caniff & Grand Trunk R. R., Detroit 11, Mich.
 Truscon Steel Div., Republic Steel Corp., Albert St., Youngstown 1, Ohio.
 Tubular Rivet & Stud Co., Wollaston 70 (Quincy) Mass.
 Tulsa Canvas Products Co., Inc., P. O. Box 2072, Tulsa, Okla.
 Turb-O-Tube Furnace, Inc., 980 Ellicott St., Buffalo 8, N. Y.
 Turco Products, Inc., P. O. Box 2649, Terminal Annex, Los Angeles 54, Calif.
 Turner & Seymour Mfg. Co., Lawton St., Torrington, Conn.
 Turner Brass Works, 821 Park Av., Sycamore, Ill.
 Tuthill Pump Co., 939 E. 95th St., Chicago 19, Ill.
 Tuttle & Bailey, Inc., Corbin Av., New Britain, Conn.
 Twin Control Burner Mfg. Co., 3240 Barker Ave., New York 67, N. Y.
 Typhoon Air Conditioning Co., Div. of Hupp Corp., 505 Carroll St., Brooklyn 15 N. Y.

U

U. S. Electrical Motors, Inc., 200 E. Slauson Av., Los Angeles 54, Calif.
 U. S. Expansion Bolt Co., P. O. Box 827, York, Pa.
 U. S. Rock Wool Co., 220 West So. Temple, Salt Lake City 1, Utah
 U. S. Tool & Die, Inc., 4 N. Main St., Sharpsburg, Pa.
 Uehling Instrument Co., 473 Getty Av., Paterson 5, N. J.
 Ultralloy Corp., 53 W. Jackson Blvd., Room 1018, Chicago 4, Ill.
 Ultrasonic Corp., 640 Memorial Dr., Cambridge 39, Mass.
 Unexcelled Chemical Corp., 350 5th Ave., New York 1, N. Y.
 Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill.
 Union Electric & Mfg. Co., 1057 Summit Ave., Jersey City 7, N. J.
 Union Mfg. Co., Inc., 6th & Washington Sts., Boyertown, Pa.
 Union Mfg. and Gauge Co., 511 N. State St., Syracuse 3, N. Y.
 Union Steam Pump Co., Capitol Ave., S. W., Battle Creek, Mich.
 Unique Mfg. Co., Inc., 221 W. Walton St., Chicago 10, Ill.
 United Air Heaters, Inc., 317 Medical Arts Bldg., Seattle, Wash.
 United-Carr Fastener Corp., 31 Ames St., Cambridge 42, Mass.
 United Chromium, Inc., 100 E. 42nd St., New York 17, N. Y.
 United Cooling Tower Co., 4022 Broadway, P. O. Box 5959, Kansas City 11, Mo.
 United Cork Cos., Central Av. & N. J. Central R. R., Kearney, N. J.
 United Electric Controls Co., 85 School St., Watertown 72, Mass.
 United Gilsonite Laboratories, Scranton 1, Pa.
 United Metal Hose Co., Inc., 36-01 43rd Av., Long Island City 1, N. Y.
 United Mineral & Chemical Corp., 16 Hudson St., New York 13, N. Y.
 (Also see "U. S.")
 United States Air Conditioning Corp., Como Av. S. E. at 33rd, Minneapolis 14, Minn.
 United States Cooling Tower Co., Div. Heatcraft Co., 414 W. Main St., Louisville 2, Ky.
 United States Gauge Div. American Machine & Metals, Inc., Sellersville, Pa.
 United States Gypsum Co., 300 W. Adams St., Chicago 6, Ill.
 United States Mineral Wool Co., Stanhope, N. J.
 United States Register Co., 344 E. Burnham St., Battle Creek, Mich.
 United States Rubber Co., 1230 Avenue of the Americas, New York 20, N. Y.
 United States Steel Corp., 525 Wm. Penn Pl., Pittsburgh 30, Pa.
 United States Steel Supply Co., 1319 Wabansia Av., Chicago 90, Ill.
 United States Stoneware Co., 60 E. 42nd St., New York, N. Y.

United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, R. I.
 Universal Blower Co., 1090 S. Adams Av., Birmingham, Mich.
 Universal Diffuser Corp., 1360 Garrison Ave., New York 39, N. Y.
 Universal Electric Co., Owosso, Mich.
 Universal Electric Western Co., 205 W. Rio Grande, Colorado Springs, Colo.
 Universal Insulating Co., Dept. 11, 333 S. Walnut St., Van Wert, O.
 Universal Major Electric Appliances, Inc., Kibby St., Lima, O.
 Universal Mfg. Co., 2902 W. Thomas Rd., Phoenix, Ariz.
 Universal Metal Hose Co., 2133 S. Kedzie, Chicago, Ill.
 Universal Products Mfg. Corp., Auburn, Ind.
 Universal Valve Co., P. O. Box 444 H, Elizabeth, N. J.
 University Fan & Blower Co., 733 University Ave., Berkeley 10, Calif.
 Uno Ventilator Co., 1236 Eastern Av., Malden 48, Mass.
 Utica Drop Forge & Tool Corp., 2415 Whitesboro, Utica, N. Y.
 Utica Products, Inc., Utica 4, N. Y.
 Utility Appliance Corp., 4851 S. Alameda St., Los Angeles 58, Calif.
 Utility Fan Corp., Div. of Utility Appliance Corp., 911 E. 59th St., Los Angeles 1, Calif.

V

Vacuum-Electronic Engineering Co., 86 Denton Ave., New Hyde Park, N. Y.
 Vacuum Gas Burner Corp., 132 N. 1st St., Olean, N. Y.
 Vallas, Lionel, 2850 W. Lake St., Chicago 12, Ill.
 Valley Electric Co., 4221 Forest Park, St. Louis, Mo.
 Van Noorden Co., E., 100 Magazine St., Boston 19, Mass.
 Van-Packer Corp., 1049 State St., Bettendorf, Ia.
 Vapor Heating Corp., 80 E. Jackson Blvd., Chicago 4, Ill.
 Vectaire Mfg. Co., 251 Howard St., Melrose, Mass.
 Velocity-Power Tool Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.
 Ventfabrics, Inc., 640 N. Kedzie Ave., Chicago 12, Ill.
 Vent-O-Lite Co., 4230 W. Taylor St., Chicago 24, Ill.
 Ventrola Mfg. Co., 501 Chestnut St., Owosso, Mich.
 Vernco Corp., 1804-22nd St., Columbus, Ind.
 Vernon Allsteel Press Co., 1351 E. 93rd St., Chicago 19, Ill.
 Vibration Eliminator Co., 10-28 47th Av., Long Island City 1, N. Y.
 Vibration Mountings, Inc., 76-19 ueens Blvd., Elmhurst 73, N. Y.
 Victor Equipment Co., 850 Folsom St., San Francisco, Calif.
 Victor Products Corp., 901 Pope Ave., Hagerstown, Md.
 Victory Engineering Corp., Springfield Road, Union, N. J.
 Viking Air Conditioning Div., National-U. S. Radiator Corp., 5601 Walworth Av., Cleveland 2, Ohio.
 Viking Mfg. Corp., 1747 Chester Av., Cleveland 14, Ohio.
 Viking Pump Co., 410 State St., Cedar Falls 1, Iowa.
 Viking Shear Co., 1063 W. 19th St., Erie, Pa.
 Vilter Mfg. Co., 2217 S. First St., Milwaukee 7, Wis.
 Vital Products Mfg. Co., 7500 Quincy Av., Cleveland 4, Ohio.
 Vogt Machine Co., Henry, 1000 W. Ormsby St., Louisville 10, Ky.
 Volcano Burner Corp., 3612 E. Tremont Av., New York 61, N. Y.
 Vulcan Electric Co., Div. Consolidated Electric Lamp Co., Inc., 88 Holten St., Danvers, Mass.
 Vulcan Radiator Co., 26 Francis Ave., Hartford 6, Conn.
 Vyke Mfg. Co., 2439-15th St., Denver, Colo.

W

W. G. B. Oil Clarifier, Inc., 139 Cornell, Kingston, N. Y.
 Wabash Mfg. Co., 2318 S. Western Ave., Chicago 8, Ill.
 Wade Mfg. Co., Div Woodruff & Edwards, Inc., Elgin, Ill.
 Wagner Awning & Mfg. Co., 2658 Scranton Rd., Cleveland 1, Ohio.
 Wagner Electric Corp., 6400 Plymouth Av., St. Louis 14, Mo.
 Wakefield Co., Vermillion, O.
 Wales-Strippit Corp., 345 Payne Ave., North Tonawanda, N. Y.
 Walker Mfg. & Sales Corp., 1711-1717 Penn St., St. Joseph 1, Mo.
 Wallace Co., William, Metalbestos Div., Belmont, Calif.
 Wallace & Gale Co., 115-119 S. Gay St., Baltimore 2, Md.
 Wall Colmonoy Corp., 19345 John R St., Detroit 3, Mich.
 Waltham Oil Burner Co., Inc., 1214 Bennington St., E. Boston, Mass.
 Walton Laboratories, Inc., 1186 Grove St., Irvington, N. J.

Ward Heater Co., 1800 W. Washington Blvd., Los Angeles 7, Calif.
 Ward Leonard Electric Co., 78 South St., Mt. Vernon, N. Y.
 Ward Machinery Co., 564 W. Washington Blvd., Chicago 6, Ill.
 Warner Ventilator Co., LeGrange, Ind.
 Wasco Products, Inc., Bay State Road, Cambridge, Mass.
 Washington Steel Corp., Washington, Pa.
 Wassco Electric Products Corp., 126 W. Cass St., Joliet, Ill.
 Water Cooling Equipment Corp., 8601 New Hampshire Ave., St. Louis 23, Mo.
 Water Cooling Tower Co., 5501 Cornell Ave., Chicago, Ill.
 Waterloo Register Co., Inc., P. O. Box 72, Waterloo, Ia.
 Waterman-Waterbury Co., 1121 Jackson St., N. E., Minneapolis 13, Minn.
 Waverly Heating Supply Co., 31 Union St., Boston 8, Mass.
 Wayne Home Equipment Co., Inc., 801 Glasgow Av., Fort Wayne 4, Ind.
 Weatherall Engineers, Inc., 387 Charles St., Providence 4, R. I.
 Weatherhead Co., 300 E. 131st St., Cleveland 8, Ohio.
 Webb Co., Jervis B., 8951 Alpine Ave., Detroit 4, Mich.
 Webber Co., Inc., A. R., 424 Howard Ave., New Haven 11, Conn.
 Webster Electric Co., DeKoven & Clark Sts., Racine, Wis.
 Wedglock Co., 5446 Satsuma Ave., North Hollywood, Calif.
 Weirton Steel Co., P. O. Box 431, Weirton, W. Va.
 Weksler Thermometer Corp., 195 E. Merrick Rd., Freeport, N. Y.
 Weldex, Inc., 2200 W. Fort St., Detroit 16, Mich.
 Welding Machines Mfg. Co., 17325 Lamont Av., Detroit 12, Mich.
 Weldit, Inc., 990 Oakman Blvd., Detroit 38, Mich.
 Wellcome Engineering Co., Del., 5605 Virginia St., Clarendon Hills, Ill.
 Wells Mfg. Corp., 1818 Wilson Av., Three Rivers, Mich.
 Werner Co., Inc., R. D., 295 Fifth Av., New York 16, N. Y.
 West Chester Chemical Co., Box 39, West Chester, Pa.
 Western Blower Co., 1800 Airport Way, Seattle 4, Wash.
 Western Engineering & Mfg. Co., 4114 Ocean Park Ave., Venice, Calif.
 Western Felt Works, 4029 Ogden Av., Chicago 23, Ill.
 Western Mineral Products Co., 1720 Madison St., N. E., Minneapolis 13, Minn.
 Western Precipitation Corp., 1016 W. 9th St., Los Angeles 13, Calif.
 Western Rock Wool Corp., P. O. Box 545, Huntington, Ind.
 Western Wood Excelsior Mfg. Co., Commerce Station, Box 4411, Phoenix, Ariz.
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.
 Westinghouse Electric Corp., Air Conditioning Div., Staunton, Va.
 Westinghouse Electric Corp., Electric Appliance Div., 653 Page Blvd., Springfield 2, Mass.
 Westinghouse Electric Corp., Lamp Div., Bloomfield, N. J.
 Westinghouse Electric Corp., Sturtevant Div., 105 Readville St., Hyde Park, Boston 36, Mass.
 Weston Electrical Instrument Corp., Subsidiary of Daystrom, Inc., 614 Frelinghuysen Av., Newark 5, N. J.
 West Wind Corp., 1800 Airport Way, Seattle 4, Wash.
 Wheelco Instruments Div., Barber-Colman Co., Rockford, Ill.
 Wheeling Corrugating Co., Wheeling Steel Bldg., Wheeling, W. Va.
 Wheelock Co., Geo. F., The, 3017 S. Second Av., Birmingham 3, Ala.
 Whipple Sheet Metal Works, Inc., 913 E. Shiwassee, Lansing 12, Mich.
 Whirlpool-Seeger Corp., St. Joseph, Mich.
 White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo.
 Whitehall Engineering Co., 506 N. Dearborn St., Chicago 10, Ill.
 Whiteley Bearing Corp., 1238 S. Ashland Ave., Chicago 8, Ill.
 Whiting Fire Power Products Corp., 1101 John Ave., Superior, Wis.
 Whitlam Mfg. Co., J. C., Wadsworth, O.
 Whitney Mfg. Co., W. A., 636 Race St., Rockford, Ill.
 Whitney Metal Tool Co., 91 Forbes St., Rockford, Ill.
 Whitty Co., Inc., 86 Western Av., Boston 34, Mass.
 Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., 575 Madison Ave., New York, N. Y.
 Wiedemann Machine Co., 4272 Wissahickon Ave., Philadelphia 32, Pa.
 Wilbur & Williams Co., 130 Lincoln St., Brighton 35, Mass.
 Wilde Register & Grille Co., 424 Bellevue, Detroit, Mich.
 Wilder Mfg. Co., Inc., Rt. 2, Box 880, Carmel, Calif.
 Wilder Mfg. Co., 2300 S. Main St., Niles, Ohio.
 Wilder Products Co., 2422 Columbus Av., Springfield, Ohio.
 Will-Burt Co., Orrville, Ohio.

Williams Div., Eureka-Williams Co., Div. of Henney Motor Co., Inc., 1201 E. Bell, Bloomington, Ill.
 Williams Furnace Co., P. O. Box 577, Buena Park, Calif.
 Williamson Co., The, 3500 Madison Rd., Cincinnati 9, Ohio.
 Willis Steel Corp., 156 N. Academy St., Galesburg, Ill.
 Willson Products, Inc., 248 Thorn St., Reading, Pa.
 Will-Weld Mfg. Co., Inc., 1523 Marcy St., Omaha 2, Nebr.
 Wilson & Co., Inc., 4100 S. Ashland Av., Chicago 9, Ill.
 Wilson, Inc., Grant, 141 W. Jackson Blvd., Chicago 4, Ill.
 Wilson, Inc., K. R., Arcade, N. Y.
 Windmaster Corp., 43-45 Vine St., Columbus 16, O.
 Wind-Way Fan & Ventilator Co., 527 St. Joseph St., New Orleans 12, La.
 Wing Mfg. Co., L. J., 306 Vreeland Mills Rd., Linden, N. J.
 Winkler & Sons, Inc., A. E., 2337 N. 31st St., Milwaukee 10, Wis.
 Wiremold Co., Hartford 10, Conn.
 Wisconsin Oil Burner Co., 2720 Emil St., Madison 5, Wis.
 Wiss & Sons Co., J., 11-45 Littleton Ave., Newark 7, N. J.
 Witt Co., A. H., 940 N. Sycamore Ave., Los Angeles 38, Calif.
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 Wolfe-Kote Co., 1225 N. 8th St., Sheboygan, Wis.
 Wolff and Co., Benjamin, 1945 N. Cornell Ave., Melrose Park, Ill.
 Wolverine Tube Co., Div. of Calumet & Hecla, Inc., Guardian Towers, Guardian Bldg., Detroit 26, Mich.
 Wonderod Corp., 4232 Lancaster Ave., Philadelphia 4, Pa.
 Wood Co., John, Heater & Tank Div., Conshohocken, Pa.
 Wood Conversion Co., First National Bank Bldg., St. Paul 1, Minn.
 Wood Steel Co., Alan, P. O. Box 112, Conshohocken, Pa.
 Wood Mfg. Co., A. R., Luverne, Minn.
 Wood's Sons Co., T. B., 1275 Fifth Av., Chambersburg, Pa.
 Woolley Engineering Co., 13827 Fenkell Ave., Detroit 27, Mich.
 Worcester Brush & Scraper Co., Div. Mason Worcester Co., 38 Austin St., Worcester 2, Mass.
 Worcester Pressed Steel Co., 99 Barber Av., Worcester 6, Mass.
 Worsham Co., Inc., 418 Mission Court, University City, Mo.
 Worthington Corp., Harrison, N. J.
 Wright Hoist Div., American Chain & Cable Co., Inc., York, Pa.
 Wright Mfg. Co., 2902 W. Thomas Rd., Phoenix, Ariz.
 Wysong & Miles Co., 625 Fulton St., Greensboro, N. C.
 Wyzenbeek & Staff, Inc., 223-235 N. California Av., Chicago, Ill.

X

XL Refrigerating Co., 1834 W. 39th St., Chicago 36, Ill.
 X-Pando Corp., 43-15 36th St., Long Island City 1, N. Y.
 XXth Century Heating & Ventilating Co., 96 Ira Av., Akron 1, Ohio.

Y

Yale & Towne Mfg. Co., The, 11000 Roosevelt Blvd., Philadelphia 15, Pa.
 Yardley Plastics Co., 138 Parsons Ave., Columbus 15, Ohio
 Yarnall-Waring Company, Chestnut Hill, Philadelphia 18, Pa.
 Yeomans Bros. Co., 1999 N. Ruby St., Melrose Park, Ill.
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 York Corp., Roosevelt Av., York, Pa.
 York-Shipley, Inc., Jessop Place and P. R. R., York, Pa.
 Yorktown Machine Co., Inc., P. O. Box 87, York, Pa.
 Young & Bertke Co., 1004-14 Hulbert Ave., Cincinnati 14, Ohio.
 Young Radiator Co., 709 S. Marquette St., Racine, Wis.
 Young Regulator Co., 5209 Euclid Av., Cleveland 3, Ohio.
 Youngstown Furnace Co., 627 Marshall St., Youngstown, Ohio.
 Youngstown Sheet & Tube Co., Stambaugh Bldg., Youngstown 1, Ohio.
 Youngstown Welding & Engineering Co., Youngstown, O.

Z

Zatko Metal Products Co., 20850 St. Clair Ave., Euclid, O.
 Zeh Co., Inc., 364 Highland Av., Passaic, N. J.
 Zeh & Hahnemann Co., 182-200 Vanderpool St., Newark 3, N. J.
 Zenith Electric Co., 152 W. Walton St., Chicago 10, Ill.
 Zick Sheet Metal Works, 25150 W. Warren Ave., Dearborn, Mich.
 Zink Co., John, 4401 S. Peoria St., Tulsa 1, Okla.
 Zonolite Co., 135 S. LaSalle St., Chicago 3, Ill.

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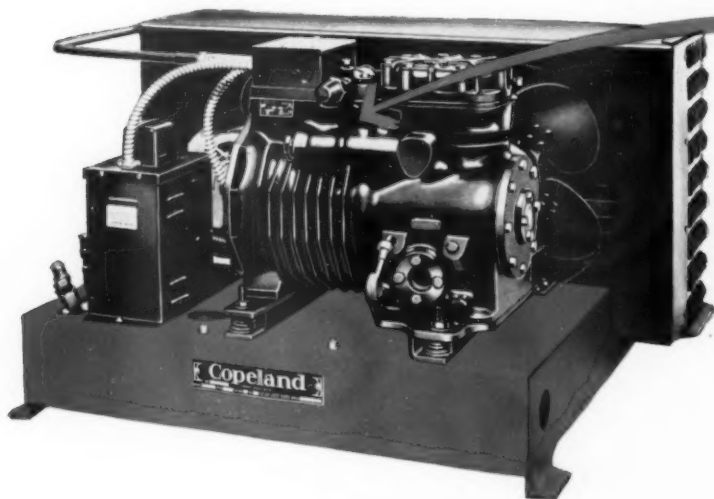
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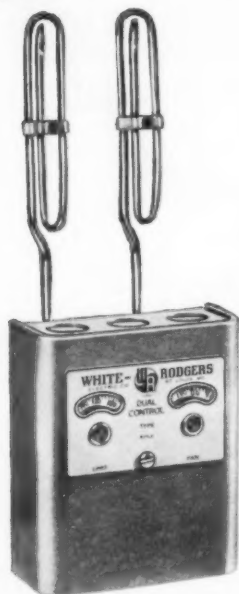


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